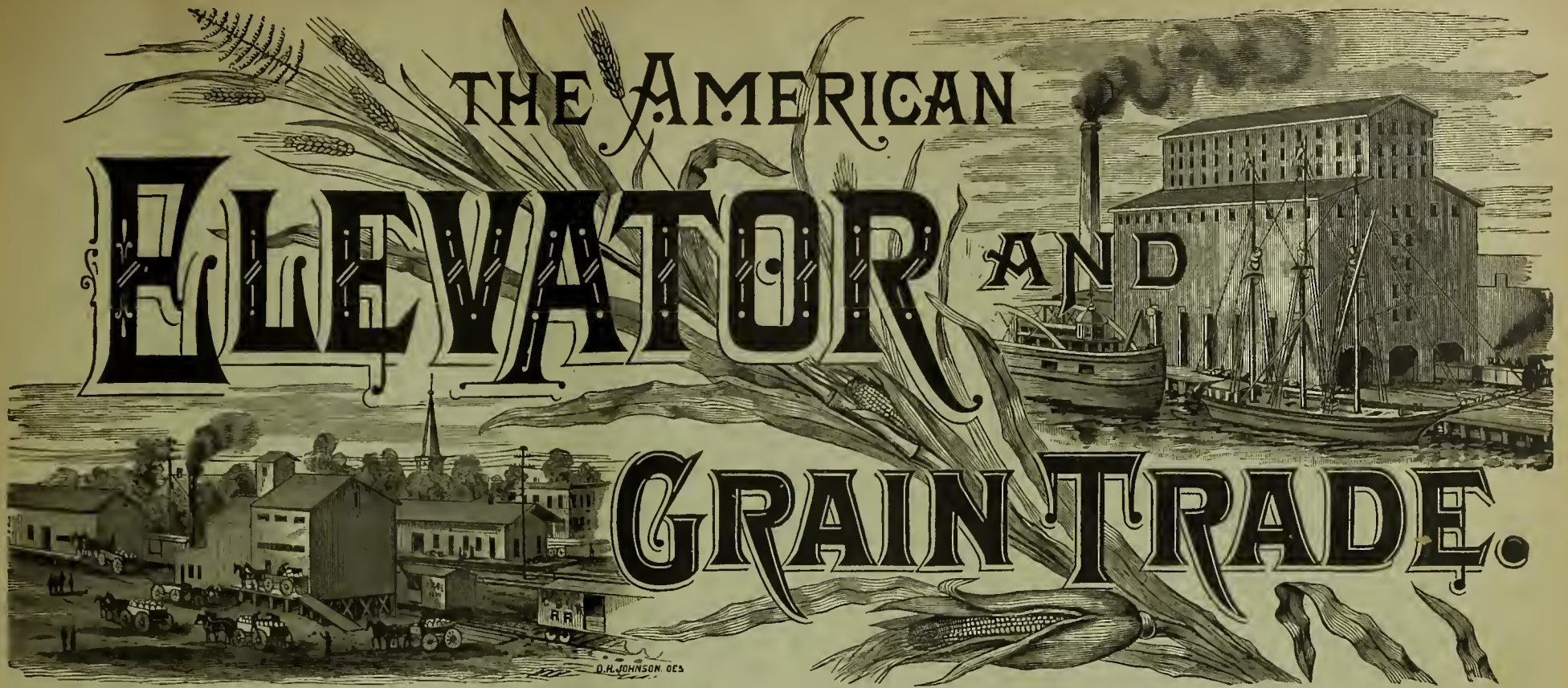


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY,  
(INCORPORATED.)

VOL. XI.

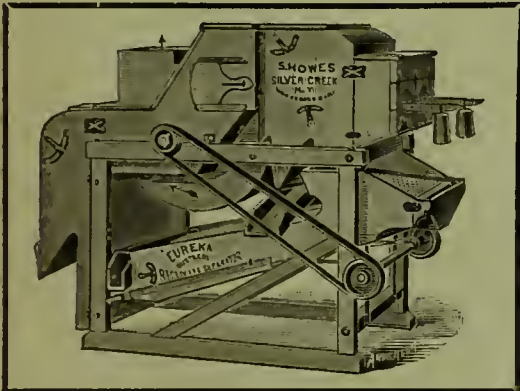
CHICAGO, ILLINOIS, OCTOBER 15, 1892.

No. 4.

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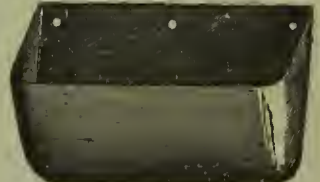
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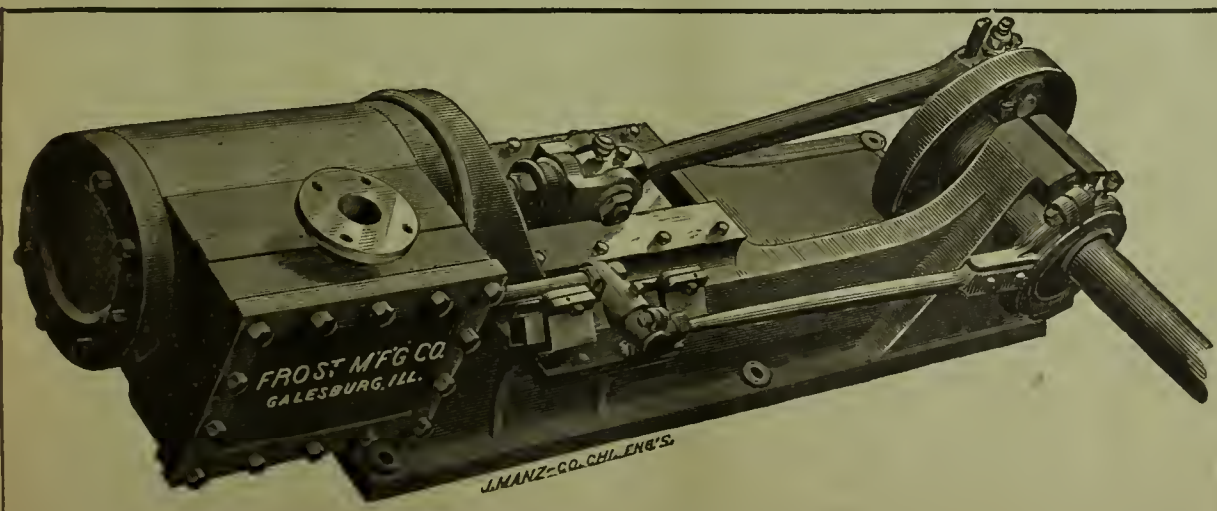
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**HANDLES**  
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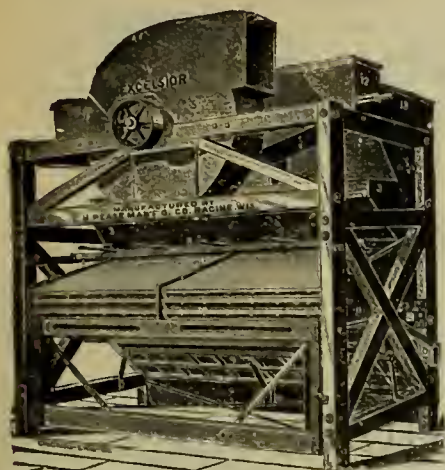
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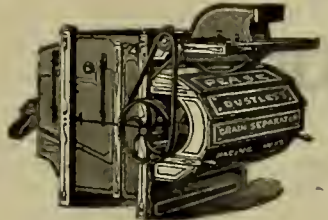
**EXCELSIOR DUSTLESS ELEVATOR SEPARATOR,**  
 Cleans, Separates and Grades Perfectly.  
 HAS NO SUPERIOR IN THE WORLD.



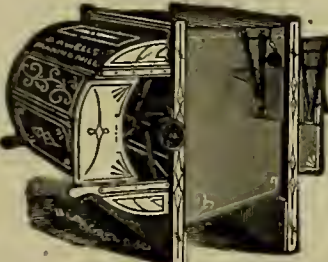
Pease Side Shake Mill for Warehouses.



Pease End Shake Mill for Warehouses.

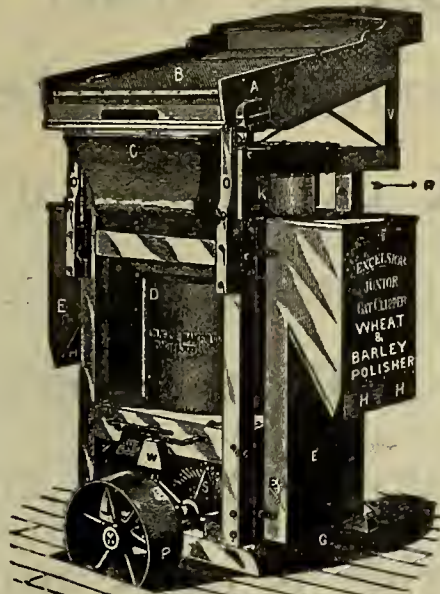


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 OF ALL OUR  
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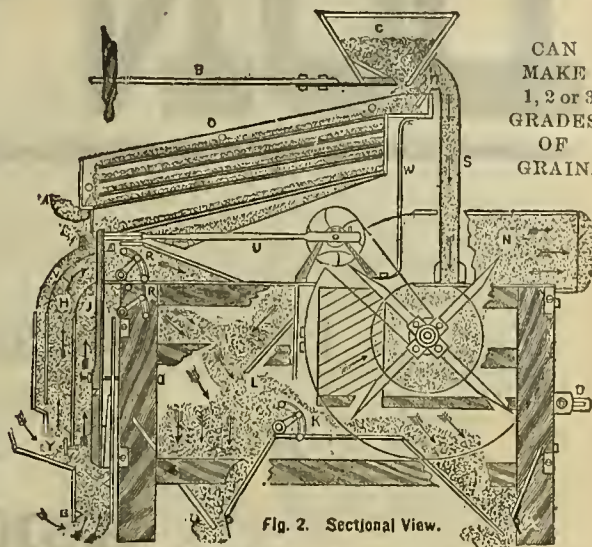


Fig. 2. Sectional View.

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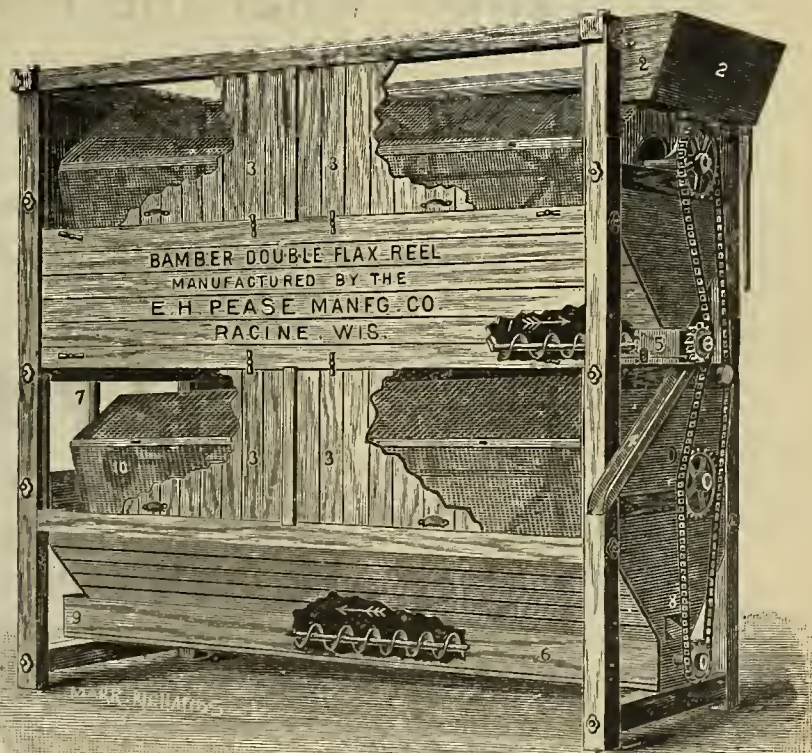
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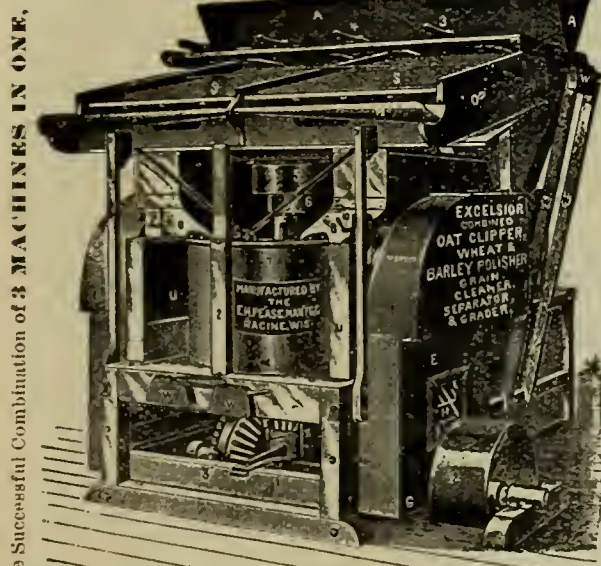
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SEE OPPOSITE PAGE.

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CHICAGO, ILLINOIS, OCTOBER 15, 1892.

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SUBSCRIPTION PRICE,  
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## THE GRAIN BEETLE AND HOW TO TREAT IT.

Bulletin No. 14 of the Oregon Agricultural Experiment Station at Corvallis contains the following regarding the grain beetle (*Silvanus surinamensis*):

Bulletin No. 5, issued from this station, contained the account of some experiments with this insect and a promise was made of further work in the same direction. From the experiments referred to and from experiments performed at the Michigan Agricultural College, bisulphide of carbon appears to be the best agent to use against this pest, and an opportunity has since been offered to put the matter to a practical test.

Wheat in the granary of a farmer near Corvallis had been badly infested with this beetle, and, at the suggestion of this department, he secured some of the liquid above referred to and with it treated two bins. In answer to an inquiry as to the *modus operandi*, etc., he writes as follows:

"I used two quarts in each of two bins 20x20 feet square. In the bin worst infested by weevil I forced the pipe (gas pipe with lower end plugged and small holes drilled in side near bottom for escape of the liquid) to the bottom of the bin in six different places (the liquid was poured into the top of the pipe). I also spread cloths over the top of the wheat. I used the same quantity of bisulphide in the other bin, but did not use any covering. In sacking the wheat my men state that they saw a few weevil on walls of the bin. This is certainly a cheap and easy method of ridding wheat of weevil."

Each bin contained about 3,000 bushels. Total cost about \$3.

It may not be out of place to state here that the precautions suggested should not be neglected, viz: Keep granaries clean and dry within and well ventilated; whitewash the interior in the spring of each year; grain in storehouses and granaries should be piled so as to allow a free circulation of air around the rows of sacks (if sacks are used, and their use seems desirable); thorough

ventilation is important that a low temperature may be maintained; grain kept in bulk should be turned over occasionally by "shoveling" to prevent its becoming heated; avoid a high temperature by every possible means; when flour or middlings in sack are infested with

## NEW ELEVATOR AT CUSHING, IA.

The elevator at Cushing, Ia., recently completed by C. D. Sanborn, of which an illustration is given herewith, was planned for large receiving and storage capacity on small ground space. Although occupying only 24x32 feet of ground the house can hold 25,000 bushels of grain. The twelve bins extend from the working floor up 34 feet. All of the bins are hopped, and six of them are cribbed, requiring 36,000 feet of 2x4's in their construction. The six flat-bottomed bins will be used only when the others are in use and more room is required.

The cupolas are commonly placed lengthwise with the main building, but Mr. Sanborn has placed his across so as to set the elevators close to the dump side of the house, thereby securing great sink capacity on a level building site.

As is shown by the cut, the house is high, standing 65 feet from track to peak of cupola. The working floor is 16x24 feet and 12 feet high. There are two sets of elevators, lifting 33 bushels per minute; and the two sinks have a fly between by which both can receive grain from one dump. The machinery is driven by a Frost Engine of 15 and a boiler of 20-horse power, made by The Frost Mfg. Co. of Galesburg, Ill.

The carpenter work was done by local mechanics, according to plans drawn by a Des Moines architect. The cost of the elevator, without machinery, was \$2,500.

The stocks of wheat in San Francisco call-board warehouses October 1 aggregated 186,000 tons, as against 228,000 tons October 1, 1891.

Buyers wish, of course, to get the bulk of the crop at as low a price as possible, and every effort will be made to hold the market down until the farmers who are forced to sell or who wish to sell, have dumped their wheat, and then the price will be allowed to rise a few cents. One year with another, the farmer who sells when his wheat is ready fares the best. The question now is, is this the year to sell from the machine?--*Northwestern Agriculturist*.



NEW ELEVATOR AT CUSHING, IOWA.

*Silvanus*, place sacks in sun and sweep off and kill (by burning, not by throwing in water) all beetles gathered on the outside.

A "Corn Belt Exposition" will be held at Mitchell, S. D., in which the twenty-one counties in the corn belt of South Dakota will participate.



### INSPECTION AT KANSAS CITY, KAN.

Some time ago the Attorney General of Kansas sent a letter to Chief Grain Inspector W. W. Haskell at Kansas City, Kan., regarding the rights and duties of inspectors at that point, from which we take the following:

I have received a letter from B. P. Waggener, the attorney of the Missouri Pacific Railroad, making complaints that in the inspection of grain in Kansas City, and at other points in the state, that the grain inspectors were breaking seals upon the cars and leaving, in some instances, the car doors open where the grain contained in said car was liable to damage from the elements and also liable to loss from larceny, and asking my opinion as to the right of the grain inspectors to allow grain inspected by them to be left in such a shape that losses would result to both the owner of the grain and the transportation company.

In reply to that letter, I gave it as my opinion that when it became necessary to inspect grain upon the track, that it was the duty of the officer to perform the work in such a manner that the interests of the grain owner and of the transportation company would be protected, and that, in my opinion, it was the intention of the legislature in the passage of the act creating the office of grain inspector, to protect the interests of the people, rather than to leave them at the mercy of the elements and of thieves. That was the only question submitted to this office, and in that letter I did not give my opinion positively upon the duties of the grain inspector, further than that their duty should be performed in such a manner as would best protect the interests of the people.

I notice that the public press, and notably, the leading papers of Kansas City, Mo., have seen fit to distort the language of that letter into an opinion that grain inspectors from Missouri and elsewhere could come upon the soil of Kansas and inspect and grade grain. No such an idea can be inferred from my letter.

Section 37 of chapter 248 of the laws of '91 provides that the state inspector shall exercise a constant supervision over the grain interests of the state; supervise the handling, inspection, weighing and storage of grain, and I can readily see how, under that section, it might become necessary to inspect grain in cars, but when it does, it certainly was not the intention of the legislature to permit the state inspector, or his deputies, to perform their duties in such manner that the owners of the grain or the transportation companies should be subject to loss on account of their carelessness. The law nowhere explicitly gives the right to an inspector to break open the seals upon the cars, which are placed there for the safeguard, both of the owners of the grain and the transportation companies, and the law appears to contemplate that the grain will be handled through the public warehouses, and thereby permit the inspection and weighing of the same without the necessity of breaking open the cars; but as said before, if it becomes necessary in performing your duties as state inspector with the supervision of handling and inspecting, weighing and storing of grain, to open cars and inspect the same, it should be done in such a manner as to respect the rights of all persons interested, and to protect rather than to leave the owners of the grain subject to loss and inconvenience.

With regard to the right of inspectors of foreign states to come upon the soil of Kansas and grade and inspect grain, Section 28 of the same chapter provides, "that any person who shall assume to act as an inspector or weigher of grain, who has not first been appointed and qualified according to the provisions of the act, shall be held to be an impostor and deemed guilty of a misdemeanor and punished upon conviction thereof."

I have never held nor intimated in any opinion, nor never shall so long as Section 28 remains on the statute books, that the inspector of the state of Missouri, or any other state, until appointed and qualified as required by the act, can come upon Kansas soil and inspect grain, and

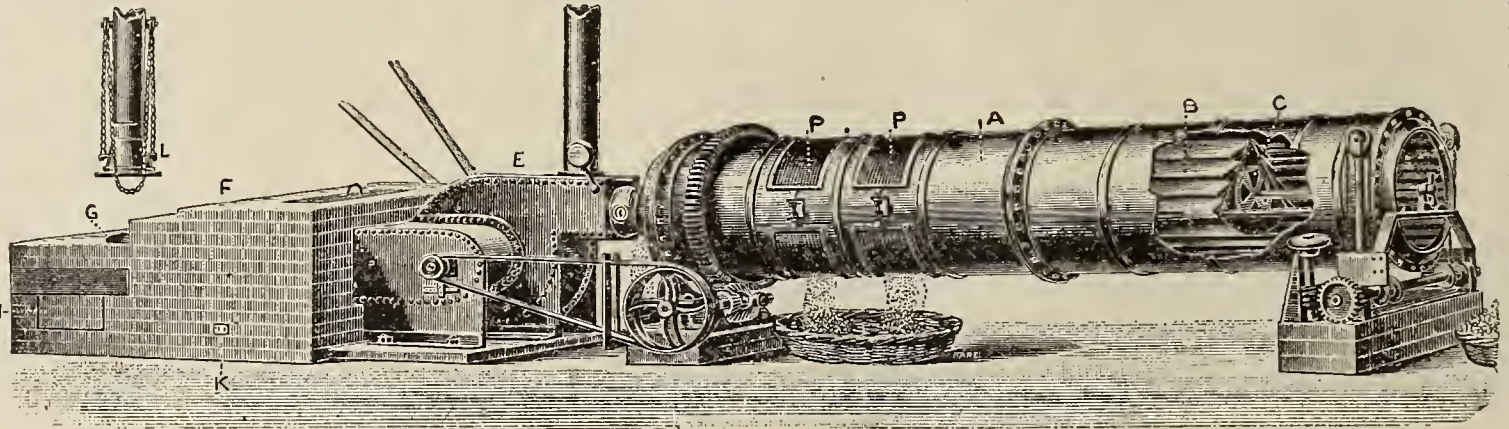
any attempt upon the part of any person to so intrude upon the soil of Kansas should be promptly met and the law rigidly enforced.

### A FOREIGN GRAIN DRIER.

The illustration given herewith shows a complete drier and cooler for wheat, corn, oats, etc., which is used in England, India and Australia. Its essential parts are the rotating cylinder *A*, the fan *E* and the hot air furnace *F*.

The galvanized iron cylinder is fitted on its inner circumference with a number of iron strips running its whole length and set at right angles to the inner surface. Through the break in the cylinder can be seen the duct *B*, which is closed at one end by a plate of sheet iron having openings regulated by the damper *C*. The duct communicates at the other end with the fan and is covered with iron plates lying one above the other like shingles on a roof, with an air space between. The dust screens *PP* are removable and can be readily replaced with tight panels when desired. At one end of the cylinder the journal on which it turns can be raised by means of two chains which are wound up on a shaft turned by a worm gear with a hand wheel. Under the cylinder at the other end is the gearing which turns it. This gearing receives motion by belt from the shaft on which the fan is mounted. The fan is compound, made of wrought iron, and makes 500 to 700 revolutions per minute.

Entering at the elevated end of the cylinder the grain to be cooled or dried is lifted by the ribs and repeatedly



A FOREIGN GRAIN DRIER.

dropped on the top plates of the duct, and while rolling over them is subjected to the action of the air, either cool or hot as the case may be. After being elevated a number of times, depending on the slant given to the cylinder, the cool or dry grain drops out at the end near the fan. The air is blown by the fan into the duct and passes forcibly between the plates down which the grain is rolling, escaping in a hot and moist state at the feed end or through the screens *PP*.

These driers are built from 12 to 30 feet long, 2 to 4 feet in diameter, and make 8 to 10 revolutions per minute. Their capacity varies from 1,000 to 50,000 bushels per week, depending on the size and the slant given to the cylinder; wet grain requiring much more time than that which is only damp or hot. A very wide range of temperature can be effectively employed, to cool hot grain or to nearly cook wet grain without danger of burning.

### RYE IS PROFITABLE.

A farmer writing from North Dakota says rye will undoubtedly prove a valuable crop in North Dakota for various reasons. It is one of the most hardy and prolific of small grains, flourishing on poor soils, and valuable as a follower after wheat. It also has the merit of early maturity and may be sowed with safety after the wheat has all been planted. It is not so liable to injury from frost and other enemies as wheat, nor is it so susceptible to hot winds and drouth. I think the best results may be obtained by sowing it early and getting it out of the way before the wheat harvest sets in. As to the profit of a crop of rye, which is the main thing after all, it has been for months only a few cents below the price of No. 2 wheat in the Milwaukee and Chicago markets. In Milwaukee I noticed that it was only one or two cents below wheat for days at a time. If given as good a chance as wheat it would prove quite as valuable a crop on this soil. It is a much easier crop to handle than flax.

### THE CARE OF GAS ENGINES.

A good many engineers look upon the gas engine as a very uncertain motor. Some years ago there may have been very good reasons for doing so, but the modern gas engine, if well looked after, is as certain in its running as a steam engine. In this article it is intended to explain how and in what parts a gas engine is liable to go wrong, and how defects are to be remedied, dealing with tube ignition gas engines only, as slides are being done away with completely. All who have had to do with the slides complain of the trouble they cause, and there is always a certain amount of uncertainty attached to them. With the ignition tube it is different, as when the tube goes wrong it is only a matter of a minute or two putting in a new one.

The parts most liable to get out of order in a gas engine with tube ignition are the tubes, valves, cams for working the valves, and timing valves to ignition tubes. Joints, of course, are liable to blow, piston rings to get tight.

Take the tube first. Many men running gas engines never think of putting in a new tube till the engine stops, as the engine may run for some time with a defective tube; but so many charges are drawn into the cylinder without any explosion following, that a bad tube will double the consumption of gas, and so it pays to take the tube out as soon as there is any irregularity with the firing, so that if no explosion follows on gas being taken into the cylinder, the attendant cannot do better than change the tube. There are times when the engine will not start, owing to a defective tube. The tube in this

case will be found to be very much swollen and very often furred. When in this state a very slight blow will break the tube. In unscrewing the old tube care should be taken that no scale or grit gets into the passage connecting the tube to the cylinder. All scales should be blown

away before quite unscrewing the tube. In most engines there is a little plug which can be unscrewed to clear the passage by pushing in a piece of wire. Tubes should never be heated to anything approaching a white heat, or they will not last long, and if too hot are liable to burst. The writer has known tubes to burst with a loud report, and to make marks in the ceiling sufficiently deep to show what danger is attached to them if too hot. If possible, it is advisable to hold up the governor while looking down at the tube, so that no explosion takes place. If the tube will not get hot, it is very often due to the Bunsen burner being alight where the air enters, but sometimes it is due to draughts.

With these precautions there ought to be no trouble with the ignition tube. If a timing valve is attached to time the explosions, there may be a little trouble, but not if the valve is kept clean. Timing valves are considered to be unnecessary evils by most makers, and diagrams taken from engines without timing valves show that the explosion can be depended upon to take place at the right moment, with very little variation. The valves connected to the engine are liable at times to get out of order, and a few wrinkles may save the attendant a lot of trouble, as he can do all that is necessary instead of wiring to the makers or calling in some fitter to set it right.

Any loss of compression can generally be traced to the valves. If, on turning the flywheel, very little or no compression is felt, it is either due to some grit or dust getting between the valve and its seat, or sometimes the valve will stick with the spring in compression—i. e., the valve spindle sticks in its gland. It is necessary in both cases to turn the engine round to the compression stroke, then the valves will be free to fall on their seats. To remove any grit from between the valve and its seat it is necessary to turn it round a few times so as to grind the grit away till the valve is seated. If the valves stick a little oil must be poured upon the spindle; it must then be worked up sharply by pulling the lever, this being done till the compressed springs brings the valve down

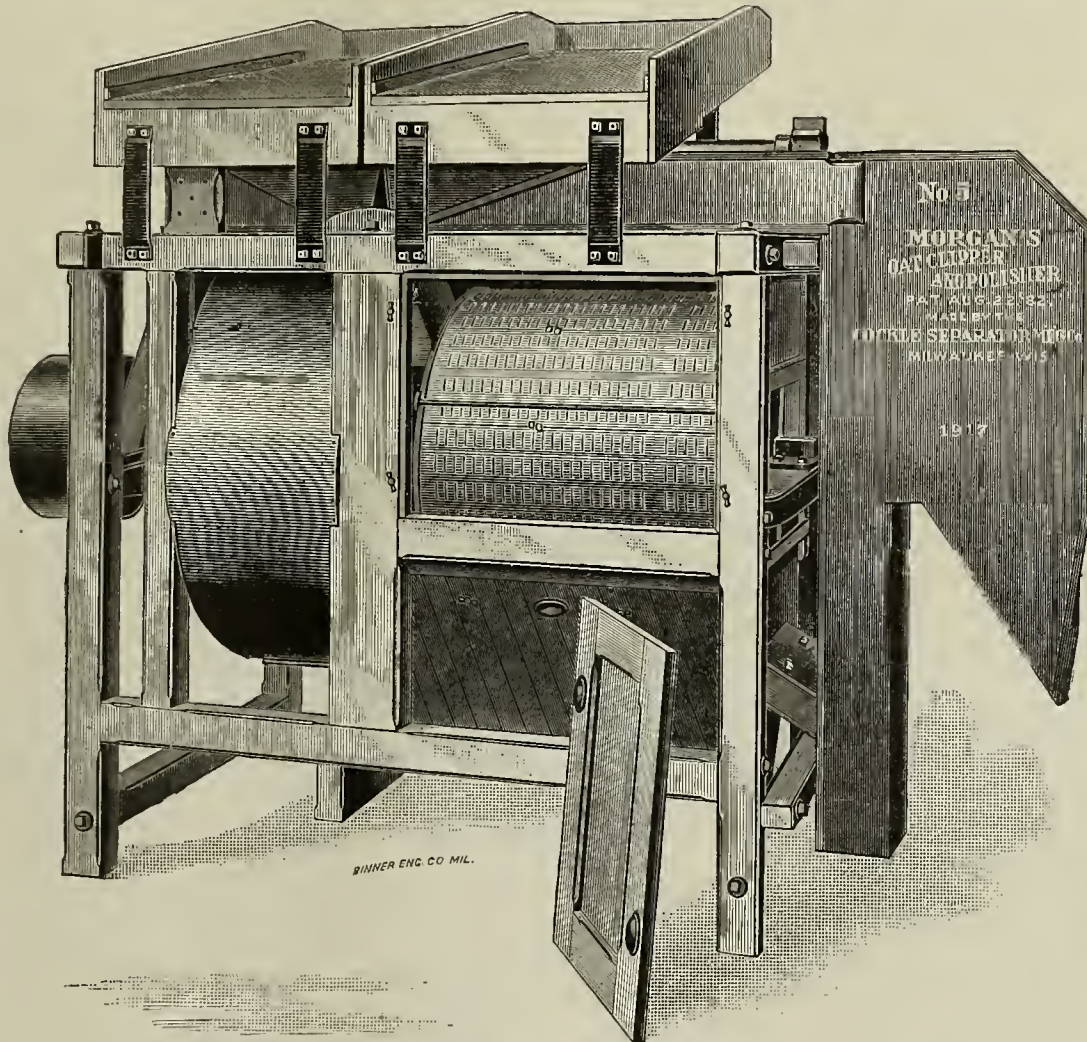


onto its seat sharply. When that happens the engine will start. The springs in time will become weak or broken; in either case new springs are necessary. A small loss of compression makes a lot of difference in the power of the engine, as the force of the explosion is nearly proportional to the amount of compression—i. e., double the amount of compression—and the power of the explosion is doubled. The lower the compression the richer the mixture must be to ignite. These are the reasons why a non-compressing gas engine is so wasteful.

The cams which work the valves are generally pinned to the shaft, so that once set they cannot move. But the writer has known cases where the engine has been taken to pieces, and in putting it together again the teeth in the wheel on the crank shaft have not geared with the same teeth of the wheel on cam shaft as before, thus putting the cams forward or backward; if the former, part of the explosion will go up the exhaust pipe owing to the exhaust valve opening too soon, and some of the burnt gases will be forced into the air box, owing to the air box opening too early. If the wheels are set a tooth or two backward, the air valve will close late, and some of the explosive mixture will be expelled into the air box, where it will explode and soon make it known that something is wrong. In both cases the explosions outside the cylinder will show that the engine is not working right. Care should be taken to mark a tooth on each wheel, so that the wheels can be put back the same as before. The economy of a gas engine depends upon how its valves are set just as much as a steam engine.

The next things that require notice are the joints. These are more particular in gas than steam engines, as a slight blow in a cylinder joint will take away all compression and stop the engine; in some engines, where there are a good many joints, it is sometimes hard to localize the defective one. If the cylinder will hold any compression the flywheel should be pulled sharply round till right on the inner dead center, where it will stop with what compression there is; then the defective joint can be found by listening or by holding a lighted match round the joints. In some engines the liner is in a separate piece to the jacket, and sometimes the back joint will go; in that case water will be drawn into the cylinder, and water will be forced out of the jacket through the outflow pipe at each compression and explosion, so that the liner has to be withdrawn and a new joint made, asbestos being the usual material for joints in gas engines. Some time ago the writer went to see an engine which the owner said did not give off the same power as it used to. The engine was running, but on applying a brake by holding a piece of wood against the flywheel, I could easily stop it. After looking over the parts that were liable to any disorder and finding them all right, also putting in a new tube and seeing that the passage before mentioned was clear, I started her again, but with no improvement. But I noticed that the first explosion had more force than the succeeding ones, and from that came to the conclusion that the gas was throttled somewhere, so I took off the gas regulator which was attached to the cylinder and there found the cause of all the trouble. The joint was made with india rubber, which had melted, so forming a valve over the gas opening. After making the joint with asbestos the engine went as well as ever. The engine drew its first charge from the clearance space between the gas and air valves, the engine most probably having stopped with the gas valve open, and so when the regulator was opened to start the engine there was time enough for the gas to fill up the clearance space. Another thing which occasionally, after running a long time, may give trouble, is the blowing between piston and liner, due to the rings being stuck or worn. In both cases the piston has to be withdrawn, and in the former the rings must be loosened with paraffin; in the case of

worn rings new ones must be put in. A little extra oil will often stop any blowing in that quarter. The writer came across rather a curious case of stoppage the other day. The owner said that the engine would start, but after one explosion would stop. On seeing the engine start, after trying the sides (as it was an old engine), and finding them in a fair condition, it was seen that the exhaust blew out between the valve spindle and gland in such a way as though it had no proper exit. When the engine was started nothing could be heard by listening to the exhaust, so the conclusion was arrived at that the pipes by some means were closed. On disconnecting the pipes they were found stopped up with exhaust residues, and in one place there was no sign of an opening. After cleaning out the pipes the engine went as well as ever; this engine had been running ten years. On starting engines of a good size, such as 6-horse power or 8-horse power, there is a chance of the engine running backward, due to not running over the center quick enough. To stop this only a small supply of gas should be let into the cylinder to make a weak explosive mixture, then the engine will fire later. Knowing these few points a gas engine attendant ought to have no trouble with his engine,



THE MORGAN OAT CLIPPER.

providing it be a good design and well made—E. J. Davis, in the *Mechanical World*.

### HOW BARLEY INCREASES.

The seed from a single head of barley, gathered and sown by itself, and its increase sown alone each season, in four years produced a crop of 1,600 bushels of grain. This shows how rapidly seed may be improved by natural selection. With the improvement of seed lies the great hope for increased profit in the cultivation of small grains, but instead of sowing the entire product of a selected head each year, the best way would be to select the best heads only, for one, two or three years, carefully winnowing out all that were not up to the standard, and fixing the type and the habit of growth. It is time that more attention be paid to this work by our experiment stations. The larger berries and the larger heads can be bred so as to perpetuate their own characteristics as surely as animals can, but it is first necessary, by constant selection for some time, to get the type fixed.

A stalk of corn thirteen feet and ten inches high has been brought from the Sunflower state by Charles Fellows, an alderman of Topeka, for exhibition in the Kansas building at the World's Columbian Exposition.

### THE MORGAN OAT CLIPPER.

The demand for cleaning and clipping oats is steadily increasing, and this has induced the Cockle Separator Manufacturing Company to build a machine expressly for that purpose. The regular wheat machine was the first one used for clipping oats, and this is, therefore, the pioneer machine for that purpose. This class of work demands a very large capacity, and this is one of the results they have aimed at in the construction of this scourer. The machine has an enormous capacity, of over 400 bushels an hour, and with the oats in first-class condition the machine has handled 500 bushels an hour. It is claimed that it is the only machine on the market that does this work satisfactorily, clipping the oats evenly, without breaking them. The only waste made is the fuzz and beard which are separated from the grain by the air currents. The clipping of the oats causes them to weigh heavier than before, increasing the market value considerably over the waste. Hence the gain.

The machine, which is illustrated herewith, has a heavy, hardwood frame, at each end of which is a cast iron bridge-tree, in which rests the main shaft. To this shaft is attached the fan and also the cylinder, with its beaters. The cylinder revolves in a stationary cast iron scouring case, which has oblong depressions on the inside, with chilled slots for ventilation. This makes an uneven scouring case, which is at the same time free from all sharp edges. This case is constructed in sections, called s'aves which can readily be removed without taking the machine apart. All parts that the grain comes in contact with are made of iron, so that the wear is reduced to a minimum. The construction of this machine is such that it can be run at a moderate speed, and the makers claim that it requires less power for the same amount of work and will do better work than any other clipper on the market.

The oats first drop on a sieve, where all sticks, straws and stones, or other foreign substances which deter the sale of oats, or that may injure the machine, are taken out. The sieve is very wide, so as to allow the oats to spread out into a thin sheet, and to give them an opportunity to pass through the perforation and allow none to tail over. After passing through the sieve the oats fall into hoppers, which conduct them into the case. The grain then falls onto the rapidly revolving cylinder head, from which it is distributed evenly around in the space between the beaters and the case. The beaters throw the oats into oblong depressions in the case, whence they rebound to the beaters, and in being thrown back and forth between the beaters and the case, the oats are thoroughly scoured and clipped. All the impurities that are loosened are immediately drawn through the slotted openings to the fan, thus not allowing any of the dirt to be rubbed into the crease of the kernel, from which it cannot be removed. After the grain leaves the case it falls into a suction spout and meets a strong current of air, which divests it of any remaining impurities before it leaves the machine. Any further information will be gladly furnished by the makers.

John E. Payne, Philadelphia, Eastern manager Erie & Western Transportation Company (Anchor Line): "I am constrained to say that we find in the AMERICAN ELEVATOR AND GRAIN TRADE a great deal of useful and valuable information."

It is reported that near the close of the latest session of congress numerous petitions were received from the farmer class asking their representatives to vote against the anti-option measure. The signers had become convinced that the panacea offered by Messrs. Hatch and Washburn belongs to the kind of remedies that are worse than the disease they are intended to cure.



### STANDARD GRADES IN THE NORTHWEST.

Farmers are said to be marketing their low grade wheat first. It is expected that a big rush of it will occur soon, as people do not care to hold it. After that the best grades will, no doubt, be more plentiful. Still wheat is too much shrunken to grade high this year. There is a serious question in the grading and in the standard grade, upon which futures are sold that confronts wheat buyers in the country. If they sell No. 1 Northern futures and their purchases are No. 2 Northern mostly, they may not be able to apply the wheat sold on the contract. When they come to buy in their contracted wheat, upon the sale of the cash wheat, there may be too little of it to supply the demand, and the future month may corner itself through mere circumstances. It is at least a position that requires careful consideration on the part of country buyers. If they sell in New York or in Chicago they are no better off, for our No. 2 Northern under current order of inspection will not probably meet the stand-

He who sells early, foregoes the possibility of an advance, but more than this, he is relieved from the possibility of a decline, and is further relieved from the expense, shrinkage and other risks of carrying the grain. He simply transfers the risk and expense to the purchaser of his wheat.

### GRAIN HANDLING FACILITIES OF ERIE, PA.

Few grain dealers of the West who have shipped grain by water to or through Buffalo have not had cause for complaint against the railroad elevator pool of that city and New York harbor. The pool by trying to force all grain through a few elevators near the close of navigation last year caused a blockade which finally reached to all ports of the grain shipping territory east of the Rockies. A number of elevators are still kept in idleness and the prospects are excellent for a repetition of last year's blockade at that port.

The work of the pool, the decline of canal navigation

tions and general short crops in the West, the port handled less wheat, oats and rye than previously. The receipts of barley were very heavy, but this was owing almost wholly to a short crop of this grain locally, and the necessity of large importations from Canada.

During the year 1891 corn shows a marked falling off while there is a marked increase in the amount of other grains handled. In 1890 there were handled somewhat over 125,000 bushels of wheat, while in 1891 there were handled over 9,000,000 bushels, and while this increase may be to a certain extent abnormal and not to be explained on the basis of general trade conditions, the increase in receipts of other grains with the exception of barley and corn, show increases of anywhere from 150 to 500 per cent. It is expected that with the advent of next spring and the completion of the new mammoth elevator of the Lake Erie & Western Transportation Company which will occur then, the port will be enabled to handle more grain than ever before. The total receipts of grain of all kinds during the season of 1887 were 6,500,000 bushels, while the receipts of 1891 were 15,000,-



ANCHOR LINE DOCKS AND ELEVATORS AT ERIE, PA.

ard requirements in Chicago, and will not meet the rules to apply on a sale of standard grade in New York.—*Minneapolis Market Record.*

### WHEN TO SELL WHEAT.

It is surprising what a number of items are going the rounds of the papers, containing advice to farmers to sell their wheat early. Statistical articles have appeared recently in Manitoba papers, showing that, taking one year with another, he who sells his wheat early in the season makes the most money. This is certainly all right in principle.

There are two ways of looking at the question, one of which is generally overlooked. The man who holds his wheat only looks at the matter from the standpoint of an expected advance in prices. He holds because he expects to get a higher price later on. He should also take into consideration the possibility of a decline in prices. Admitting that the probability of an advance is equal to the possibility of a decline in values, the advantage is in favor of selling early. It costs money as well as includes risk of loss from fire, etc., and shrinkage, to carry wheat. These facts turn the scales decidedly in favor of selling early.

and the exorbitant charges at New York harbor have been influential in causing shippers to send grain by other routes. Philadelphia and Montreal have each profited thereby, also Baltimore and Newport News, but in a lesser degree. The increase in shipments to Philadelphia via Erie has not been as great as was naturally expected they would. This has been due to shippers' prejudice against departing from the old routes and misconception of the facilities offered for shipping grain via this route. The advantages offered by this route are such that the elevators at Erie should be kept running at their full capacity day and night during the season of navigation. Before the season of 1893 opens new elevators will probably be completed at Erie, in anticipation of the great increase in business which is rightly expected will occur as soon as shippers learn of the excellent facilities offered at that port for handling through grain.

The year 1890 was one of special activity in lake grain trade, and there was received at the port of Erie during that year, over 7,250,000 bushels of corn alone, more than double the amount received during any of the ten years previous. During the same year, however, there was nothing remarkable to note as far as the receipts of other grains were concerned, and in fact, owing to local condi-

000 bushels, an increase of 9,000,000 bushels, for which wheat is chiefly responsible.

The grain received in 1891 was from the following ports:

	Bushels.
Chicago.....	8,336,933
Milwaukee.....	881,700
Duluth.....	539,578
Toledo.....	840,796
Detroit.....	56,507

Total bushels.....10,655,514

#### RECEIPTS BY LAKE.

	1889.	1890.	1891.
Barley, bush.....	88,722	221,532	54,875
Corn, bush.....	3,522,634	7,208,564	2,254,694
Oats, bush.....	551,762	55,000	158,297
Wheat, bush.....	1,126,056	136,022	9,764,806
Rye, bush.....	90,679	143,039	754,048
Flaxseed.....	10,000	74,643	668,794
	5,380,853	7,928,800	10,655,514
Flour, barrels.....	1,522,252	1,434,274	973,257
Flour to wheat.....	7,611,260	7,171,370	4,866,285
Total grain.....	13,001,113	15,100,170	15,521,799

The docks of the Anchor Line controlled by the Erie & Western Transportation Company, shown in the illus-



tration presented herewith, stretch out into the bay until a junction is reached with the elevator docks, which stretch away to the westward in the form of an L. Erie has been the home port of the Anchor Line Company ever since its organization. The docks of the company are covered with warehouses for the receipt and storage of freight, most of which is of a package description. In the year 1891 there were imported via Erie and the Anchor Line 21,000,000 pounds of freight of this character, and in 1891 this trade had increased to such an extent that 61,000,000 pounds were carried, an increase of 300 per cent. During the year 1881 there were exported through the same channels over 107,000,000 pounds of miscellaneous merchandise, and 1891, ten years later, this amount had increased to 215,000,000 pounds.

The grain elevators shown in illustration are located on the L dock referred to above, and are separated from the east end of the public dock by East slip. There are standing on this dock three elevators, one of which is quite old, while the two remaining are more modern structures, one of them, in fact, being of the latest type and of comparatively recent construction. As each year passes, it is found that these elevators handle more and

### NORTH DAKOTA PLATFORM LAW.

There is a law in North Dakota called the railroad platform law, that requires the construction of platforms by railroad companies at their stations, for the use of farmers to load grain into cars. The railroad companies have so far very generally ignored its provisions. Action is now taken to compel a compliance with the law. The law provides:

"If any railroad company, after notice as provided for in this act, shall fail, refuse or neglect to build and erect said platform as required by this act, within the required sixty days, the commissioners of railroads are hereby authorized and empowered, and it is made their duty, to notify such railroad company to appear before them at a certain time and place to show cause, if any there be, why said commissioners should not issue an order requiring such railroad company to comply with the requirements of this act. Said commissioners of railroads shall have power after such hearing, to issue an order upon said railroad company commanding them to build and erect such platforms as contemplated by this act, providing said commissioners of railroads shall, upon

cordance with petitions of farmers filed with the commissioners as provided by law.

The commissioners have received many applications from farmers throughout the state to compel the railroad companies to erect such platforms. The railroad companies unite in opposition to the law, claiming it to be unconstitutional. The Soo road is building side tracks at different places, erecting platforms there to accommodate its patrons. The principal fight is made against the Great Northern, it having longer lines through the principal grain regions than the other roads. The Northern Pacific appears to stand upon its technical rights, declining to erect platforms as directed by the commissioners, but builds them at its own option where they lay side tracks, for the special convenience of farmers having long distances to haul to regular stations.

### SEPARATE THE WHEAT.

There is some sprouted wheat this season all through the country where stacking or threshing had not been done previous to the second week of September, says the *Market Record* of Minneapolis. Rains penetrated the



ELEVATORS AT ERIE, PENN

more grain each season, particularly for export via Philadelphia and Baltimore.

Elevator "B" is 100 feet long by 75 feet wide, and has a working storage capacity of 225,000 bushels. Elevator "A" is made up of two sections; section 1 being 100x110 feet, and section 2 100x55 feet, the two sections together having a working storage capacity of 400,000 bushels. Elevator "A" will unload from vessels 16,000 bushels per hour, and elevator "B" 8,000 bushels per hour, or an aggregate of 288,000 bushels per day of twelve hours, and can load an equal amount into cars per day. Elevator "A" has an appliance known as a movable tower, so that this elevator can unload from two hatches of a vessel at once. It is the first elevator in the country to use that sort of an appliance.

The Anchor Line has two freight houses at Erie, one of them is 500 feet long by 50 feet wide, and the other 885 feet long by 100 feet wide. Its elevators handled at Erie, this season, up to September 10, 10,000,000 bushels of grain, and 76,300 tons of merchandise.

The contract has already been let for another immense warehouse that will increase storage capacity desired by shippers, and new elevators to double the present grain handling facilities are among the improvements in prospect in which grain shippers are interested.

A serious blockade in the grain trade is threatened at Buffalo. The elevators are reported to be filled.

such examination and hearing, deem such platform or platforms necessary."

Another section says: "Every railroad company or corporation, neglecting or refusing to comply with the requirements of this act after having been properly notified, shall be deemed guilty of misdemeanor, and be subject to a fine of not less than \$500 for every thirty days such failure shall continue after notice as aforesaid."

Farmers are asking for platforms. The Great Northern, Northern Pacific, and Chicago, Milwaukee & St. Paul railways all deny the constitutionality of the law. Refusal was filed with the commissioners by the Milwaukee road upon receiving notice to erect platforms. The demand for a platform on this road at Tyler Station, Richland county, is to be made a test case and the Attorney-General has been apprised to appear with the commissioners in behalf of the state.

The Northern Pacific officials have signified their intention to erect platforms, not in recognition or obedience to the law, but of their own volition at Mekinock, Johnston, Bean's Station, and perhaps at Kelly's, all in Grand Forks county.

The Great Northern likewise denies the authority of the law but will erect platforms at Thompson, Reynolds, Ojata and Emerado in Grand Forks county, and perhaps Orr and McCanna. At all other points it is understood all railways in the state refuse to erect platforms in ac-

shocks and caused the mischief. Of course there is loss to be sustained, and on account of that loss the tendency of too many farmers will be to bind the sprouted grain among the sound, that greatly exceeds the unsound. That course will naturally be more expensive than to separate the unsound grain from the sound before threshing, for the loss on the small quantity of sprouted grain will be much less than the loss of a grade on the whole mass. Even if sold by sample the loss would be as much probably as if sold by grade, for millers are set against grain containing sprouted kernels.

Perhaps five per cent. will cover the sprouted kernels. If these are carefully kept out the remainder of the wheat will be good milling grain although it may not grade above No. 2 on account of too light weight. To trust to the machine to break off the sprouts sufficiently to hide the defects will not work well, for grain is handled by experts who will see it and pay a lower price for it when they buy.

The same wheat that is sprouted is also damp and when run together in the stack or the machine will spread dampness through the whole, damaging it even more than the sprouting.

The corn cutters in the vicinity of Springfield, Ohio, have formed an association to fight the patent corn cutting sleds and refused to work for farmers using the obnoxious sleds.



### LIABILITY OF CARRIERS—CONTROL OF INTERSTATE COMMERCE.

The carrier may so contract as to limit the common law liability to such losses only as have been caused by his own negligence. But the courts of this country with great uniformity, and on grounds of public policy, will not permit the carrier, by stipulation incorporated into his bill of lading, to relieve himself from loss which has been the result of his own fault or negligence. It has been held otherwise in New York in *Mynard vs. Railroad Company*, 61 N. Y. 180, and *Spinetti vs. Steamship Company*, 80 N. Y. 71. But so far as any inquiry has extended, the reasoning of these cases has not been accepted by other courts in this country.

In *Liverpool & G. W. S. Company vs. Phenix Insurance Company*, this question was exhaustively discussed by the United States Supreme Court (19 Sup. Ct. R. 469). It was there distinctively held that while the carrier could relieve himself, by proper form of stipulation inserted in his bill of lading, from loss caused by unavoidable accident or from the fault of others, such stipulation would be void when made to express exemptions from liability where the loss was the result of the carrier's own negligence. The court said: "The ordinary contract of a carrier does involve an obligation on his part to use due care and skill in navigating the vessel and carrying the goods, and, as is everywhere held, an exception in the bill of lading of perils of the sea or other specified perils, does not excuse him from that obligation, or exempt him from liability for loss or damage from one of those perils to which the negligence of himself or his servants has contributed." *Navigation Company vs. Bank*, 6 How 344, *Express Company vs. Kountse*, 8 Wall 343, *Transportation Company vs. Downer*, 11 Wall 129, *Grill vs. Serew Company* L. R. I. C. P. 600, L. R. 3 C. P. 376, *Hart vs. Railroad Company*, 112 U. S. 331, 238, 5 Sup. Ct. Rep. 131.

The English decisions appear to be in support of the doctrine laid down in New York. In *Mo. Pac. Ry. Co. vs. Sherwood et al.*, 19 S. W. Rep. 455, suit was brought to recover the value of a lot of cotton destroyed by fire, while contained in compress at Greenville, Texas. The loss was without the fault of the railroad company, who had received the cotton for shipment at Greenville, Texas, and agreed to transport for a specified rate over its own and connecting lines, to London, Eng. The bill of lading given by the plaintiff in error to the shipper, expresses that the railway company should not be liable for any loss or damage which the property might sustain while in transit, caused by fire or other accident. Article 278, Rev. St. of Texas, reads:

"Railroad companies and other common carriers of goods, wares, and merchandise for hire, within this state, on land or in boats or vessels on the water, entirely within the body of this state, shall not limit or restrict their liability as it exists at common law, by any general or special notice, or by inserting exceptions into the bill of lading, or in any other manner whatever, and no special agreement made in contravention of the foregoing provision of this article shall be valid."

The Texas court held that as the burning of the cotton was not caused by the negligence of the railroad company, it was not liable for the loss; that the provision of the Texas statute quoted above did not, by its own terms apply, except when the contract for shipment was to be performed wholly in that state. The court said, "The statutes apply only to domestic shipments. If the statutes be intended to apply to foreign shipments, and to annul a contract of foreign shipment, exempting a carrier from liability for loss by fire not chargeable to its negligence, the statute is a regulation of interstate commerce, and as such regulation is void."

This declaration of the Texas court undoubtedly represents the rule of law correctly in regard to interstate commerce. When the policy is written to insure a carrier on its liability, it is unnecessary to state that the insurer will not be held for the loss of the property mentioned, unless it is shown that it is one for which the carrier is chargeable. This and analogous questions have received, during recent years, a good deal of attention from the courts. In discussing the rights and duties of a carrier, collateral and constitutional questions of great interest have been frequently involved.

That interstate commerce is not subject to legislative control has been distinctly held many times by the United States Supreme Court. In the case of *Western Union*

*Telegraph Company vs. Commonwealth of Pa.*, 128 U. S. 39, it was held that the state of Pennsylvania could not recover taxes on telegraph messages to be delivered in another state; that while it was competent for the state legislature to impose a tax on messages transmitted between points wholly within the jurisdiction of Pennsylvania, that Congress alone had the power of regulating commerce between different states. The same doctrine has been laid down in *McCall vs. California* 136 U. S. 105, *Minnesota vs. Barba*, 136 U. S. 313, *Home Insurance Company vs. N. Y.*, 134 U. S. 594, *Leisy vs. Hardin*, 135 U. S. 100.

The last authority here cited is known as "the original packet case." The opinion was rendered by Chief Justice Fuller, who examined and critically reviewed nearly all of the decisions in this country in which the commerce clause of the constitution had been involved, and the conclusion reached by the court was in full accord with its previous decisions cited above—that the regulation of foreign or interstate commerce is exclusively within the power of Congress, and that any restrictions imposed by state legislature on commerce between different states would be unconstitutional and void.

### POINTS ABOUT LOADING GRAIN.

BY B. J. T.

It is the desire of every grain shipper to get the best weights and prices obtainable. To do so he should see that the cars are swept clean before loading, particularly where they have been previously loaded with wood, coal or lime, which is too often the case.

I have seen cars loaded with grain that had previously been loaded with coal, and the coal had not been swept off the belt rail. The result was that in transportation the coal had all fallen down on the grain and it looked as if it had been in a wreck and lost a grade.

Cars are so often poorly coopered that every time the car gets a jar more or less grain runs out, which, of course, means a loss in weight. It is not good policy to use a grain door or even a half door on top of the original grain door when a six or eight-inch board is all that is necessary. Any one familiar with the manner of inspection will readily see the danger of putting on too high a door because the inspectors will knock them off to gain admittance, and they are never replaced. The grain will run over from the place of inspection to the elevator, which is all the way from three to eight miles, which means a loss in weight.

There is also a large amount of grain shipped on the market that might be cleaned at a cost of ½ cent per bushel and with very little loss in weight, that would go a grade better and bring the shipper from 3 to 5 cents more money.

I think it would be well for grain shippers to observe the above points in loading grain for the market.

### THIS YEAR'S RYE CROP.

Following is an estimate of the world's production of rye by Beerbohm, the quantities being expressed in quarters of eight bushels each:

	1892.	1891.	1890.
European Russia.....	75,000,000	59,800,000	76,050,000
Poland .....	6,000,000	4,500,000	5,500,000
Germany .....	31,000,000	28,900,000	27,000,000
Austria.....	9,500,000	8,475,000	9,809,000
Hungary.....	6,000,000	5,000,000	6,900,000
France .....	8,500,000	7,875,000	9,200,000
Spain.....	2,000,000	2,000,000	2,180,000
Belgium.....	2,500,000	1,000,000	2,100,000
Holland .....	1,400,000	1,000,000	1,500,000
Roumania and Bulgaria .....	2,000,000	1,725,000	2,000,000
Denmark.....	2,750,000	2,300,000	2,040,000
Sweden.....	2,500,000	2,750,000	2,625,000
America .....	3,400,000	3,750,000	3,500,000
Canada (Ontario).....	250,000	250,000	195,000
Total quarters....	152,300,000	129,325,000	150,590,000
Total bushels. .	1,216,000,000	1,034,600,000	1,204,720,000

It is evident that the peasants of Russia will experience no scarcity of the "staff of life" for the next twelve months. Germany, too, has an abundant rye crop, and Austria, Hungary and Poland an ample one.

Timothy seed amounting to 419,029 pounds was exported in August, against 567,171 pounds in the preceding August; and during the eight months ending with August 7,026,445 pounds was exported, against 5,042,441 pounds during the corresponding period of 1891.

### WILL ERECT TRANSFER HOUSES.

One of the greatest needs of the grain trade of this country is first-class grain transfer elevators for transferring grain at railroad terminals from one ear to another. We have frequently called attention to the advantages of such houses and hope our work has had effect. This need is to be supplied in a measure by a company organized for this special purpose.

The National Grain Transfer and Weighing Company has been organized under the laws of Illinois with a capital of one-half million dollars for the purpose of building and operating a chain of transfer elevators from the grain sections of the country to the Eastern seaboard.

Kansas City is to be the Western terminus, Joliet, Ill., the central point, and Buffalo, N. Y., the Eastern end, where the last change will be made for the seaboard. This is intended to drain about all the grain producing region of the United States. Smaller elevators will be extended north and south from this great Eastern and Western chain as business demands.

The plans for the enterprise are now fully matured. The company's organization is as follows: President, Horace Tucker, late general freight agent of the Illinois Central Railroad; secretary, H. J. Coon of H. J. Coon & Co.; treasurer, Edward S. Richards, late of E. S. & C. W. Richards.

Two transfer elevators will be constructed at Buffalo, N. Y., one at Joliet and two at Kansas City. The daily capacity of the elevators will be 320 cars each, making a capacity at Buffalo of 640 cars, Joliet 320 cars and Kansas City 640 cars. For the present only one elevator will be built at Kansas City and the others will follow later. Each of the elevators will cost \$30,000, and their locations will make the purchase of much adjoining land for side track necessary.

The first elevator at Kansas City will be built at Rose-dale in the yards of the Kansas City, Fort Scott & Memphis road. This will transfer grain to the South as well as to the East, and will probably make other elevators necessary from Kansas City to the gulf, with stations at Memphis and other Southern cities.

Work on this elevator will begin within sixty days and will be pushed rapidly. The other elevator will be built in the Union Pacific yards, but work will not be started on it for some time.

These transfer elevators will not have a cubic foot of storage capacity. They are intended simply to transfer grain from the cars of one company to the cars of another, so that a Western road may not be obliged to send its rolling stock across the continent, possibly to be used for hauling coal, wood, hides or any other stuff by another road, as is now the custom. Under the new arrangement Western roads may bring their grain cars to Kansas City, transfer the load and have the cars back in their territory again in a short time. The loaded car of the Eastern road goes east to its territory, while the emptied car of the western road goes back to the country to be filled again.

The company running the elevators guarantees the weight of its first elevator to be the weight at the seaboard, so that instead of waiting three or four weeks to get returns on his car the shipper waits only three or four days, till the car reaches the first transfer elevator.

The new way of transferring saves shrinkage. Under the present system of transferring by hand, shoveling from one car to the other, there is a shrinkage of from 300 to 1,000 pounds on the car. In the new system the shrinkage does not exceed one tenth of 1 per cent. or about thirty pounds to the car.

Also connected with the elevator hoppers is a spout for sacking. Kansas City is a great sacking center, especially for southern points. There are about forty sacking gangs of four men each at work in the city, and each gang requires a team and wagon to haul around portable scales from one car to another in the yards. A man stands at the spout extending from the elevator hopper and sacks the grain as it comes down. It is passed on to the next men for tying, and soon it is placed in the waiting car. A car of grain may be transferred and sacked by this process in fifteen minutes.

Nearly three million bushels of white corn has already been sent to Mexico to satisfy the hungry people in the famine districts. A peculiar point about these shipments is that only white corn is wanted by the Mexicans, who are willing to pay several cents per bushel more than for mixed corn.



## CARRYING GRAIN TO NEW ORLEANS.

It is but a few years since the railroads running into this city were hardly considered important feeders of the grain trade of New Orleans. The wheat and corn coming here for export were received entirely by river in barges and even in the sacked grain line the railroads played a much less important part than the river craft. During the past few years all this has changed, and the railroads are beginning to compete actively with the river for the transportation of export grain, while in the matter of sacked grain intended for domestic consumption the roads now bring here much more than three times the quantity brought by the river.

Of course the absence of elevators was responsible for the small part taken by the railroads in past years in the grain exporting trade at this point, but that there were no elevators was largely due to an erroneous belief that this city was not destined to become a grain port of importance. The building of a single elevator several years ago at Southport demonstrated that, with the proper terminal facilities, the railroads tapping the grain section could secure all the grain they could handle for export, via New Orleans; and, this fact once demonstrated, the business has steadily grown.

This year the grain movement by rail has set in early, and nearly all the roads centering here report daily receipts of grain for export. The Southport Elevator is undergoing repairs, and the new Texas and Pacific Elevator has not yet commenced operations. As soon as the idle elevators are at work we may expect to see a most liberal movement of grain for export by rail.

The receipts of grain by the rail route by no means implies a falling off in the movement by barges on the river. Last year, which developed quite a liberal rail movement, actually witnessed the largest movement by barges yet experienced, so that the river route for bulk grain has in no wise been impaired by the rail competition, the enterprise of the railroads having been exerted in a way to open up new territory rather than to interfere with the old-time river route. The rail movement of grain has therefore been a clear gain to the business of New Orleans.—*Picayune, New Orleans*

## GRADING WHEAT.

Although the former legislators of North Dakota have repeatedly enacted laws providing for the state inspection of grain, which afterward proved to be unconstitutional the New Rockford *Transcript* of that state is fiercely opposed to selling wheat by grades. The editor who no doubt is well posted in such matters writes: "One of the greatest and most successful devices ever invented by scheming men for dishonest purposes is the present method of grading wheat now in vogue at the elevators and by those places of highway robbery called Boards of Trade. We often hear it said that it takes two to make a bargain, but in this case it takes only one, those who buy, leaving the seller nothing to say any more than if he had no interest in the trade. Grading is a plan to get something for nothing, or more properly speaking, for getting a valuable article for much less than it is worth. A sample of wheat with a few green kernels in it or a little shrunken that will make just as good flour as if those kernels were absent, is bought by the miller according to the grade and not at all according to the value of the article."

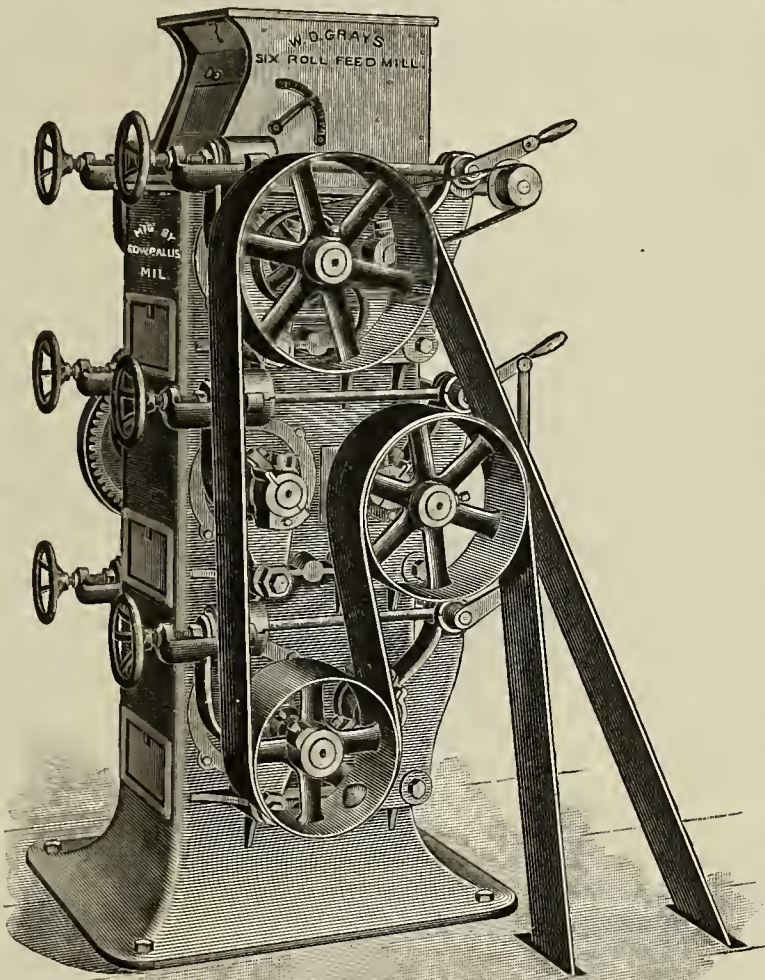
"The present system of grading grain affects so large a class of honest people and so near approaches highway robbery that it seems as if there ought to be a remedy for it somewhere. There is a law against theft, against burglary and against swindling generally, but this device for cheating farmers has been so cunningly devised that the existing laws seem powerless to afford a remedy. It is one of the greatest conspiracies ever organized in this or any other country—for a bad purpose—a trust to keep down prices and to rob a certain class of honest people of their hard earnings. It is wrong and ought to be remedied."

This wisacre has probably never stopped to consider the purpose of classifying grain into grades. He must think that all wheat, all corn, and all oats and other grains are of the same quality. He should buy or produce grain for a couple of seasons, then he would be able

to appreciate the fact that the qualities of wheat vary nearly as much as do the qualities of man.

## A NEW FEED ROLL.

The Edw. P. Allis Company of Milwaukee, Wis., have just placed on the market a new six roll three reduction roller mill for reducing corn, oats, rye, barley, buckwheat, etc., to meal or feed, of which three sizes are named, viz., 9x14, 9x18 and 9x24. The frame is a solid cast iron shell with suitable openings in same for inspecting the grinding and the removal of the rolls for recorrugating. One roll of each pair is mounted upon a swinging arm by which it is adjusted vertically to tram them, or horizontally to obtain the correct grinding set. Spreading levers are provided for all three pairs of rolls. Spiral springs on each pair of rolls prevent injury to the corrugations, should any hard foreign substance pass through with the grain. Automatic shaker feeders are furnished, as they give better results than any other type. The action of spreading the top rolls stops the feeder, while returning the rolls to their original grinding set starts the feeder in motion again. The roll shafts extend entirely through the body of the roll. The corrugations of the



EDWIN ENG. CO. MIL.

A NEW FEED ROLL.

top rolls are rather coarse, those of the middle pair are somewhat finer, while those of the lower pair are still finer, all being graduated to suit the kind and amount of work for which the roller mill is sold. The fast rolls of each pair are driven by one belt from the driving shaft. The slow rolls on the differential side are driven by machine cut spur gear inclosed by cast iron housing. Rolls are removed from the frame endways.

By means of three reductions an enormous capacity or unusual fineness of the product can be obtained, or in the case of grinding meal, buckwheat or rye flour two reductions can be made on the two upper pairs of rolls, and after bolting, the middling or grits resulting may be reground upon the lower rolls. The manufacturers will be pleased to send catalogue giving further details to any reader, and answer any questions regarding same which have not been touched upon in the foregoing.

The export trade to Mexico is booming. Corn shipments are going into the Republic at Eagle Pass, Tex., in such quantities that it is found impossible to forward them promptly to destination. The hauling capacity of the Mexican International Railway is strained to the utmost, and although passenger engines and leased locomotives are employed, the freight still accumulates. Ten trains containing over 300 cars, and hauling 15,000 bushels of corn, left Piedras Negras yesterday, October 2, for the South, yet there are 600 cars of grain for Mexico sidetracked between Eagle Pass and San Antonio.

## PORTABLE GRAIN ELEVATORS.

Recently the iron works of this city received a letter from a grain merchant asking for information as to where to purchase a ready-made, portable grain elevator. Of course the answer was a disappointment to the buyer who was informed that such a thing as a portable elevator was not practicable. No two locations for warehouses are alike, consequently no two houses are alike. Some must go deeper into the ground than others, and the mode of furnishing power, the capacity and kind of machines used all vary as the conditions demand. This was explained to the merchant, who was much surprised to think that he could not buy a ready-made house and have it come in sections, into which, when put together, he could put such machinery as he then thought he needed. In fact, a machinery agent had informed him that he could do so, and it would have cost him a pretty bit, but for the fact that he made inquiry of a house that disabused his mind.

Speculating on the cost of a portable house, such as the inquiry in this case indicated, it was found by a competent builder that it would cost within 10 or 15 per cent. as much as a substantial warehouse built to stay where it was put. And looking into the matter a little further it was seen that no matter what the portable feature promised it would amount to less because such a house, if practicable at all, could not be moved and re-erected without a new foundation. It is a case of bringing grain to the warehouse, not of taking the warehouse to the grain.

## COUNTRY WHEAT BUYING.

A North Dakota report says the grain elevator companies will buy this season on the reasonable basis of 2 to 3 cents margin. To do this inspection must be rigid. No special prices for round lots will be considered, and agents are ordered not to write or telegraph for them, as no attention will be paid to such communications.

That while the companies prefer to buy the grain outright, they will, if the farmer desire, receive his grain, keep it for fifteen days without charge, and then buy it from him or ship it for him to be sold either at Minneapolis or Duluth. This privilege of time will enable samples of grain to be sent below for grading, if a satisfactory grade here is not offered. The company, however, are not bound to buy on the grade given if it is not satisfactory to them.

The companies will handle wheat through their elevators, clean it, ship to Minneapolis or Duluth, consigned to themselves and sell for the owner.

If the farmer insists on a side track shipment the elevator company offers, if consigned to them at terminal points, to receive it and make the same effort to please the patron as if the wheat passed through the elevator.

From the above it will be seen that the elevator companies will buy or will give fifteen days' storage free. If there is reason for it, will ship to be sold below, and will receive either elevator or side track shipments like any commission house.

The prices of wheat and the variations between the grades have already been fixed to meet the new order of things.—*Minneapolis Market Record*.

## CEREAL PRODUCTION OF THE UNITED STATES.

The Superintendent of Census has issued the preliminary statistics of cereal production in the United States, prepared under the direction of Mr. J. Hyde, special agent in charge of the statistics of agriculture. The figures of the last census, compared with 1880, are as follows:

	Census 1890.		Census 1880.	
	Acres.	Bushels.	Acres.	Bushels.
Barley ...	3,221,099	78,349,602	1,997,727	43,997,495
Buckwh't ...	838,777	12,130,668	848,389	11,817,327
Corn.....	72,076,074	2,124,559,312	62,368,504	1,754,591,678
Oats.....	28,297,272	609,198,797	16,144,591	407,858,999
Rye.....	2,171,622	28,422,354	1,842,233	19,831,593
Wheat...	35,574,341	468,306,778	35,430,333	459,488,137
Total ..	140,179,185	3,520,967,511	118,631,779	2,697,580,229

The art of advertising is not made so much of a study as it should be.



**LONG ON WHEAT.**

No holidays this year for us,  
No jolly Christmas joys;  
A cloud has settled on the house,  
On mother, girls and boys.  
No costly presents can we sport,  
Scarce can we buy our meat;  
My husband's pocketbook is short,  
For he went long on wheat.

Illusive wheat! how could you do't?  
How could you fall and fall,  
Until you left us destitute  
Of sealskin sacques and all?  
With Brown and Smith, and such as those,  
This year we can't compete;  
For we fell down, while they uprose,  
All by the fall in wheat.

Just why it fell, and where 'tis gone,  
And its condition now,  
Are facts I cannot read upon  
My husband's gloomy brow;  
But we must stint and save until  
He gets upon his feet;  
For he was caught, against his will,  
By going long on wheat.

In business he may be a bull,  
At home he is a bear;  
He fills our cup of sorrow full,  
And drives us to despair.  
His losses in the street, he says,  
May put us on the street,  
And drear and doleful are the days  
Since he went long on wheat.

**INSPECTION RULES FOR KANSAS.**

The following rules governing the inspection of grain in the state of Kansas went into effect Aug. 23, 1892:

**RULE I—WINTER WHEAT.**

No. 1 White.—To be bright, sound, dry, plump and well cleaned pure white winter wheat.

No. 2 White.—To be sound, dry, well cleaned, pure white winter wheat.

No. 3 White.—To be sound, dry, white winter, reasonably clean.

No. 1 Red.—To be bright, sound, plump, dry and well cleaned red or red and white mixed winter wheat. If mixed must not contain over one-eighth white wheat and weighing not less than 61 pounds to the measured bushel.

No. 2 Red.—To be sound, well cleaned, dry, red or red and white mixed winter wheat. If mixed, must not contain over one-eighth white wheat and weighing not less than 59 pounds to the measured bushel.

No. 3 Red.—To be sound, reasonably cleaned, red or red and white mixed winter wheat below No. 2 Red, weighing not less than 56 pounds to the measured bushel.

No. 4 Red.—To be red, white or mixed, thin or bleached winter wheat, reasonably sound and unfit to grade No. 3 Red.

Rejected Winter Wheat.—All white, damp, tough, very musty, very smutty, trashy, dirty, damaged or thin white or red and white mixed wheat, falling below No. 3 White.

Rejected Winter.—All damp, tough, very musty, very smutty, trashy, dirty, damaged or thin wheat falling below No. 4 Winter.

**MEDITERRANEAN WHEAT.**

No. 1.—To be sound and well cleaned.

No. 2.—To be sound and reasonably clean.

No. 3.—To cover sound Mediterranean Wheat not clean or plump enough to grade No. 2.

CALIFORNIA, COLORADO, WASHINGTON, IDAHO AND UTAH WHEAT.

No. 2.—To be sound, dry, well cleaned, pure white wheat, free of smut; grown in Colorado, Utah, California, Washington or Idaho.

No. 3.—To be sound, dry, reasonably cleaned white wheat; grown in Colorado, Utah, California, Washington or Idaho.

Wheat of above description of lower grades to be based on the merits as regular No. 4 or rejected.

**KANSAS HARD WINTER WHEAT.**

No. 2.—To be sound, dry and reasonably clean, hard winter wheat and to weigh not less than 59 pounds to the bushel.

No. 3.—To be sound and reasonably clean hard winter wheat and to weigh not less than 56 pounds to the bushel.

No. 4.—To be reasonably sound, thin or bleached hard winter wheat, unfit for grade No. 3 Hard.

In case of mixture of hard winter wheat with soft

winter wheat, it shall be graded according to the quality thereof and classed as hard winter wheat.

**HARD SPRING WHEAT.**

No. 1.—To be bright, sound and well cleaned hard spring wheat.

No. 2.—To be bright, sound, hard spring wheat, reasonably cleaned.

No. 3.—To include all dry and sound club or hard spring wheat not equal to No. 2.

**SOFT SPRING WHEAT.**

No. 1.—To be bright, sound and well cleaned soft spring wheat.

No. 2.—To be bright, sound, soft spring wheat reasonably cleaned.

No. 3.—To include all dry and sound soft spring wheat below No. 2.

**WHITE SPRING WHEAT.**

No. 1 White.—To be bright, sound and well cleaned white spring wheat.

No. 2 White.—To be bright and sound white spring wheat, reasonably clean.

No. 3 White.—To include all dry and sound white spring wheat below No. 2.

**REJECTED SPRING WHEAT.**

All damp, tough, musty, very smutty, trashy, dirty, damaged or thin spring wheat falling below No. 3.

**MIXED SPRING AND WINTER WHEAT.**

All mixed spring and winter wheat of sound quality to be graded as spring, according to quality and condition.

**RULE II—CORN.**

No. 1 Yellow.—Shall be pure yellow corn, sound, dry and well cleaned.

No. 2 Yellow.—Shall be three-fourths yellow, sound, dry and reasonably clean.

No. 3 Yellow.—Shall be three-fourths yellow, reasonably dry and reasonably clean, but not sound enough for No. 2 Yellow.

No. 1 White.—Shall be pure white corn, sound, dry and well cleaned.

No. 2 White.—Shall be seven-eighths white, sound, dry and reasonably clean.

No. 3 White.—Shall be seven-eighths white, reasonably dry and reasonably clean, but not sound enough for No. 2 White.

No. 4 White.—Shall be seven-eighths white, not wet or in a heating condition, and unfit to grade No. 3 White.

No. 1 Corn.—Shall be mixed corn of choice quality, sound, dry and well cleaned.

No. 2 Corn.—Shall be mixed corn, sound, dry and reasonably clean, but not good enough for No. 1.

No. 3 Corn.—Shall be mixed corn, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 4 Corn.—Shall include all mixed corn, not wet or in a heating condition, that is unfit to grade No. 3.

**RULE III—OATS.**

No. 1 Oats.—Shall be mixed oats, sound, clean and free from other grain.

No. 2 Oats.—Shall be mixed oats, sweet, reasonably clean and reasonably free from other grain.

No. 3 Oats.—Shall be mixed oats that are slightly damp, slightly musty, dirty or from any other cause unfit to grade No. 2.

No. 4 Oats.—Shall be mixed oats, not wet or in a heating condition, or from any other cause unfit to grade No. 3.

No. 1 White Oats.—Shall be pure white, sound, clean and free from other grain.

No. 2 White Oats.—Shall be seven-eighths white, sound, reasonably clean and reasonably free from other grain.

No. 3 White Oats.—Shall be seven-eighths white, but not sufficiently sound and clean for No. 2.

No. 4 White Oats.—Shall be seven-eighths white, not wet or in a heating condition, badly stained or from any other cause unfit to grade No. 3 White.

**RULE IV—RYE.**

No. 1.—To be plump, sound, bright and well cleaned.

No. 2.—To be sound and reasonably cleaned.

No. 3.—To include all damp, musty, dirty rye unfit for No. 2.

Rejected.—To include all badly damaged, very dirty and very thin rye, unfit to grade No. 3.

**RULE V—BARLEY.**

No. 1.—To be plump, bright, sound and free from other grain.

No. 2.—To be sound and reasonably clean.

No. 3.—To be reasonably clean and merchantable.

Rejected.—To include all unsound and damaged barley.

**RULE VI—NO GRADE GRAIN.**

All grain that is wet, hot or in a heating condition shall be classed as no grade.

W. W. HASKELL,

State Grain Inspector.

GEO. C. MARTIN,

For Kansas City, Kan., Board of Trade.

A. W. OLIVER,

For Wichita Board of Trade.

P. KILLEY,

For Atchison Board of Trade.

J. H. THOMLIN,

For Winfield Board of Trade.

Inspectors are cautioned to observe carefully the rules for inspecting the No. 2 grades of all grain; under no circumstances to accept any but perfectly sound grain as No. 2.

**CEREAL PRODUCTION IN 1889.**

According to the Census Bulletin the average yield per acre and the acreage in 1889 in the states named was as follows:

States.	Barley.	Buck-wheat	Indian Corn	Oats	Rye.	Wheat.
Illinois....	28 93	10 97	36 84	85 75	15 87	16 68
Acres....	41,390	9,761	7,869,917	3,848,897	165,589	2,239,861
Indiana....	24 34	10 47	30 35	28 56	13 95	14 52
Acres....	10,280	9,548	3,586,190	1,102,479	62,890	2,570,017
Oregon....	23 15	10 71	19 68	27 20	9 23	16 81
Acres....	37,803	250	12,101	218,736	6,845	553,270
Washington	24 62	15 93	16 52	34 92	10 88	17 03
Acres....	51,531	27	9,583	65,089	1,763	372,658
Maine....	23 91	20 83	34 95	30 17	6 19	19 39
Acres....	11,972	22,395	10,891	121,612	1,077	4,116
N. Hamp're	22 78	24 08	41 64	33 52	11 33	17 36
Acres....	4,934	3,117	23,746	26,618	1,056	2,027
Vermont....	25 61	20 20	40 70	32 64	12 80	19 62
Acres....	16,427	13,429	41,790	101,582	3,379	8,397
Mass....	21 69	12 66	39 11	27 13	10 98	16 19
Acres....	1,788	2,473	34,010	14,331	10,665	112
R. Island..	22 06	8 51	32 46	27 55	12 35	8 27
Acres....	363	41	7,819	3,648	779	11
Connecticut	21 05	11 51	36 39	24 30	13 25	16 89
Acres....	273	4,006	40 4 5	24 428	16,100	443
Georgia....	11 03	11 06	11 33	9 22	4 15	5 58
Acres....	549	319	2,582,316	516,879	20,949	196,633
Alabama....	9 96	13 13	14 14	9 37	6 67	5 26
Acres....	201	352	2,127,548	344,831	2,190	39,641
Florida....	14 22	6 63	9 77	9 32	15 70	9 06
Acres....	9	19	378,906	42,003	853	32
Delaware....	17 08	9 48	17 72	19 76	8 55	15 91
Acres....	12	325	174 796	19,374	775	94,368
Iowa....	25 84	11 36	41 28	39 09	15 42	14 09
Acres....	518 729	25,243	7,585,522	3,752,141	93,707	585,548
Kansas....	23 01	9 72	35 49	30 49	14 65	19 21
Acres....	7,201	6,907	7,314 765	1,463,526	199 146	1,582,635
Arkansas....	9 38	13 08	20 61	14 60	6 15	6 80
Acres....	106	388	1,648,443	288,332	2,470	140,464
California..	21 51	15 64	33 87	25 41	8 90	14 30
Acres....	815,995	664	70,303	57,569	27,413	2,840,807
Colorado....	27 43	17 79	12 67	28 59	11 74	22 41
Acres....	12,086	117	119,310	87,959	4,615	126,999
New Mexico	23 60	22 00	20 45	22 13	11 74	15 65
Acres....	1,484	142	28,539	9,314	69	21,792
Arizona....	23 77	.....	19 06	23 10	7 14	16 15
Acres....	10,644	.....	4,331	1,472	29	6,225
Nebraska....	22 06	7 81	39 40	29 16	13 33	13 23
Acres....	82,590	15,358	5,480,279	1,503,515	81,372	798,855
Wyoming....	24 94	10 00	12 73	27 39	14 57	16 10
Acres....	464	10	1,976	13 223	141	4 523
Montana....	34 59	9 85	13 96	29 10	13 43	24 43
Acres....	4,652	13	1,019	52,768	14	18,696
Idaho....	23 64	24 69	18 13	26 70	9 90	18 47
Acres....	10 004	16	1 362	21,997	1,092	63,704
Utah....	25 36	21 07	14 66	26 29	10 01	17 93
Acres....	6,440	15	5,782	22,747	3,389	84,505
Nevada....	29 35	.....	23 87	28 40	9 30	22 44
Acres....	8,081	.....	274	3,490	54	3,631

After sixteen years of experimenting, E. S. Carman, editor of the *Rural New Yorker*, has succeeded in producing a new grain which is a cross between wheat and rye. The hybrid was made by mixing the pollen of wheat and rye blossoms. It is believed now that the new grain is firmly established.

The new version of the "hold your wheat" farmers of last year, is that many were satisfied to hold in stack or in shock, or in any other way to "hold," believing that it would pay to let creditors wait until spring so that the holders of wheat could gain enough in price so that the profit would pay the debts. But the price went down. This year the price starts down. The conditions are such as to warrant expectation that the price will advance when the position is fully realized.

Wheat moved more freely in the Northwest in August than ever before, and more freely in September than ever before from a crop that was no larger than this. The August receipts came mainly from the old crop, left over to this. The September movement was chiefly of new wheat, and the fact of a light yield seems to argue plainly that an unusual proportion of the crop was marketed in the first month of the new crop season. That point will be seen more clearly as the season progresses.—*Minneapolis Record*.



## INVENTED THE FIRST GRAIN DRIER.

The wide reputation that Sylvester Marsh made while in Chicago was as a manipulator of damaged grain, says the tale teller of a Chicago daily. After the year 1855 (in this year he went to Davenport to engage in the grain trade, but soon returned) he dealt extensively in wheat and corn. He had often found his consignments by canal and cars wet and damaged. His inventive imagination was quickly set to work to devise a remedy. In 1860 he obtained a patent for an invention which was at once put to the test at the principal grain elevators, and was proved to be highly valuable. Inspection grades were in consequence raised—certainly they were maintained—and the inventor began to receive a good income in royalties. Here is a description of the drying process: A tower seventy-five feet high, built of brick and iron, fire-proof, receives the grain at the bottom, where it is elevated to the top and passes slowly down over perforated iron plates, this motion of the falling grain being constant and uniform, regulated by slides or valves at the bottom. The grain in motion forms a solid column seven feet wide and three inches deep. There are two columns of grain, and a furnace at the bottom supplies hot air, which is evenly distributed by suction fans, so as to pass constantly and equally through the grain the entire length of the kiln. Temperature is regulated by thermometers set in the walls at several points. Mr. Marsh, in this invention, was a benefactor, and millions of bushels, first and last, were saved to the producer and to the consumer. He erected a drier which he operated himself.

## THE GRAIN TRADE OF POLAND.

The average yield for three years, 1888, 1889 and 1890, for Poland has been as follows: Wheat 1,200,000 quarters, rye 3,733,000, oats 2,556,477, and barley 1,003,000; potatoes 27,500,000 chetwerts, equal 159,000,000 bushels, or 33 per cent. of total crop of European Russia, viz., 83,500,000 chetwerts, or 481,500,000 bushels. Potatoes is one of the staple articles of food for laboring and peasant class. Peas 25 per cent. of total crop of European Russia.

Export trade is done principally through Dantzic and partly through Königsberg. The exports to Königsberg have to a certain extent fallen off since the import duties of Germany and Austria were put on, and the lowering of the railway tariff from interior Russian markets to frontier points.

The total export of all breadstuffs from Poland for the last ten years averages yearly 3,857,143 cwts., which nearly equals the total transport by rail both for export and interior purposes, viz., wheat, rye, oats, barley and flour 13,311,000 poods, of which 10,134,000 poods was grain, which is all collected and dispatched in comparatively small quantities, no station sending off more than 1,000,000 poods.

A considerable quantity of grain is transported by water, principally by the Vistula to Dantzic, which received by water in 1890 1,554,710 poods, 1889 2,373,570 poods, and 1888 3,220,190 poods; and by rail 1890 1,684,000 poods, and 1889 2,297,000 poods. The exports to Dantzic have been gradually on the decrease since 1865, which then amounted to 18,000,000 poods. The transport by Vistula has also been on the decrease, many of the large warehouses along the river are standing empty, or only partly occupied for storage of fruit, vegetables, leather, salt, etc., etc. The grain is usually bought with delivery to river port at a specified date; upon arrival is immediately loaded in barges already awaiting. Terms of payment are usually one-third in Russian and two-thirds in German money. The barges are tugged up and float by the stream down the river, collecting the grain at all the touching points. The principal part is transported on the opening of navigation in April, and upon the current year's crop being put on the market in September. The grain of the small peasant farmers seldom is bought for export, it is nearly all bought up by local bakers, millers and Jew merchants.

The large growers all sell their produce to the Jew merchant, in whose hands the whole commerce of the country is practically centered, and without whom the Polish landowner cannot exist or realize his produce. The large grain firms have mostly resident agents, in many cases actually residing on the estate, who from time to time post their principals upon the financial position

of the grower, and who then buy when he is most in need of cash. The large firms also subsidize the smaller merchants, who again advance cash to their respective clients. Latterly the large growers have been gradually selling direct to the miller, brewer, distiller, etc., going by the middleman and the merchant, as the former have taken to giving cash advances on the grain purchased. The growers nearly all are financially in straightened circumstances, estates mortgaged and personally heavily in debt. In view of this and the gradual decrease in the exports the few large firms have considerably reduced their line of credit. The rate of interest varies from 6 to 20 per cent., and a further deduction of 6 per cent. is made for cleaning and sorting the grain, but which sometimes is not deducted should the grain be up to quality, which it rarely is in these cases.—*Corn Trade News*.

## J. C. KILNER.

J. C. Kilner, president of the York Foundry and Engine Company, of whom a portrait is given on this page, was born in Yorkshire, England, in 1855, and moved to London in 1863. At the close of his school days he accepted a position in the counting house of Kilner Bros., glass bottle manufacturers, Kings Cross, London, of which his father was managing partner. In 1876 he visited this country as their representative at the Centen-



J. C. KILNER.

nial Exposition, and in 1877 returned to reside. He went into partnership with a brother who had preceded him on a farm in York county, Neb., where he remained until 1882. Then he moved to York, and in the fall took an interest in the York foundry with L. C. Olcott. The style of the firm was Olcott & Kilner for some time. Mr. Olcott retired on account of failing health, and soon after Mr. G. F. Downie, a practical machinist, came into the firm and continued until 1887, when a company was formed and incorporated, of which the officers are J. C. Kilner, president; P. A. Kilner, secretary, and G. P. Chessman, vice-president.

The business was commenced in a wood shanty in what is now North York, but soon outgrew its accommodations and the company removed to its own brick buildings in a more central location in the town. The buildings now consist of a two-story warehouse 24x36 feet, a machine shop 24x48, a moulding room 40 feet square, a pattern shop 24x36, besides various other buildings for the storage of boilers, pig iron, scrap iron, sand, etc. During the present summer about twenty-five hands have been kept busy as many hours as they have cared to work. The company while doing a general foundry and machine shop business is making a specialty of mill and elevator machinery, of which it keeps a full supply on hand.

In 1889 Mr. J. C. Kilner removed to Chicago, since then the business has been under the efficient management of P. A. Kilner, who has this year been represented "on the road" by S. C. Grippen. The business continues to grow, and the company has every prospect for a bright future.

Light weight oats have been a drug on the Chicago market for several weeks. Many cars have lately been received weighing only 18 to 25 pounds to the measured bushel. It will be a good crop for clippers.

## TABLE FOR FINDING VALUE OF HAY.

If you want to avoid errors in computing the value of hay cut out the following table, paste it upon a thick piece of cardboard and hang beside your scale beam.

LBS.	\$4.00	\$5.00	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00
10	.02	.03	.03	.04	.04	.05	.05
15	.03	.04	.05	.05	.06	.07	.08
20	.04	.05	.06	.07	.08	.09	.10
25	.05	.06	.08	.09	.10	.11	.13
30	.06	.08	.09	.11	.12	.14	.15
40	.08	.10	.12	.14	.16	.18	.20
50	.10	.13	.15	.18	.20	.23	.25
60	.12	.15	.18	.21	.24	.27	.30
70	.14	.18	.21	.25	.28	.32	.35
80	.16	.20	.24	.28	.32	.36	.40
90	.18	.23	.27	.32	.36	.41	.45
100	.20	.25	.30	.35	.40	.45	.50
200	.40	.50	.60	.70	.80	.90	1.00
300	.60	.75	.90	1.05	1.20	1.35	1.50
400	.80	1.00	1.20	1.40	1.60	1.80	2.00
500	1.00	1.25	1.50	1.75	2.00	2.25	2.50
600	1.20	1.50	1.80	2.10	2.40	2.70	3.00
700	1.40	1.75	2.10	2.45	2.80	3.15	3.50
800	1.60	2.00	2.40	2.80	3.20	3.60	4.00
900	1.80	2.25	2.70	3.15	3.60	4.05	4.50
1000	2.00	2.50	3.00	3.50	4.00	4.50	5.00
1100	2.20	2.75	3.30	3.85	4.40	4.95	5.50
1200	2.40	3.00	3.60	4.20	4.80	5.40	6.00
1300	2.60	3.25	3.90	4.55	5.20	5.85	6.50
1400	2.80	3.50	4.20	4.90	5.60	6.30	7.00
1500	3.00	3.75	4.50	5.25	6.00	6.75	7.50
1600	3.20	4.00	4.80	5.60	6.40	7.20	8.00
1700	3.40	4.25	5.10	5.95	6.80	7.65	8.50
1800	3.60	4.50	5.40	6.30	7.20	8.10	9.00
1900	3.80	4.75	5.70	6.65	7.60	8.55	9.50
2000	4.00	5.00	6.00	7.00	8.00	9.00	10.00

When you have decided upon the price per ton look at the top of the tables for this price, then find the number

LBS.	\$11.00	\$12.00	\$13.00	\$14.00	\$15.00	\$16.00	\$17.00	\$18.00
10	.06	.08	.07	.07	.08	.08	.09	.09
15	.08	.09	.10	.11	.11	.12	.13	.14
20	.11	.12	.13	.14	.15	.16	.17	.18
25	.14	.15	.16	.18	.19	.20	.21	.23
30	.17	.18	.20	.21	.23	.24	.26	.27
40	.22	.24	.26	.28	.30	.32	.34	.36
50	.28	.30	.33	.35	.38	.40	.43	.45
60	.33	.36	.39	.42	.45	.48	.51	.54
70	.39	.42	.46	.49	.53	.56	.60	.63
80	.44	.48	.52	.56	.60	.64	.68	.72
90	.50	.54	.59	.63	.68	.72	.77	.81
100	.55	.60	.65	.70	.75	.80	.85	.90
200	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80
300	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70
400	2.20	2.40	2.60	2.80	3.00	3.25	3.40	3.60
500	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50
600	3.30	3.60	3.90	4.20	4.50	4.80	5.10	5.40
700	3.85	4.20	4.55	4.90	5.25	5.60	5.95	6.30
800	4.40	4.80	5.20	5.60	6.00	6.40	6.80	7.20
900	4.95	5.40	5.85	6.30	6.75	7.20	7.65	8.10
1000	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
1100	6.05	6.60	7.15	7.70	8.25	8.80	9.35	9.90
1200	6.60	7.20	7.80	8.40	9.00	9.60	10.20	10.80
1300	7.15	7.80	8.45	9.10	9.75	10.40	11.05	11.70
1400	7.70	8.40	9.10	9.80	10.50	11.20	11.90	12.60
1500	8.25	9.00	9.75	10.50	11.25	12.00	12.75	13.50
1600	8.80	9.60	10.40	11.20	12.00	12.80	13.60	14.40
1700	9.35	10.20	11.05	11.90	12.75	13.60	14.45	15.30
1800	9.90	10.80	11.70	12.60	13.50	14.40	15.30	16.20
1900	10.45	11.40	12.35	13.30	14.25	15.20	16.15	17.10
2000	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00

of pounds in the left hand column, trace across the line to the column under the price and you will have what that number of pounds come to at that price per ton.

## BUFFALO'S GRAIN TRADE.

The grain receipts at Buffalo continue to increase, and although 1891 was a banner year, it will be surpassed this year. During September 19,041,741 bushels of grain and 1,263,274 barrels of flour were received at that port, against 22,309,678 bushels and 1,113,362 barrels of flour during September, 1891.

The receipts by lake from the opening of navigation to October 1 during the last ten years have been as follows:

	Flour, bbls.	Grain, bu.	Grain, Inc. Flour, bu.
1892.....	6,574,445	92,346,612	125,218,837
1891.....	4,140,451	79,776,521	100,478,776
1890.....	3,739,111	64,472,756	83,168,311
1889.....	2,956,343	62,509,670	77,291,386
1888.....	3,302,248	55,221,034	71,732,274
1887.....	2,739,495	60,746,740	74,444,205
1886.....	3,166,703	53,427,169	69,010,684
1885.....	1,606,879	37,214,208	45,248,603
1884.....	1,667,302	37,606,439	45,942,944
1883.....	1,508,154	48,657,469	56,198,419

Rice county, Kansas, is said to be the largest broom corn center in the world. The year's crop in that county, it is expected, will bring over \$300,000. The Topeka Capital says that buyers from New York, Columbia, Philadelphia, Rochester and Eastern markets are in Rice county and are offering the farmers the top of the market for the broom corn crop.



## COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

### REMEDY FOR THE SACK NUISANCE.

*Editor American Elevator and Grain Trade:*—I have been in the grain trade for ten years, and have found the sack business a great nuisance. Sacks are furnished free to the farmer; and under this rule are usually ricked up in the field, all the way from ten days to as many months, the farmer using them for corn, saddle blankets, collar pads and storing seed wheat.

This season, however, myself and the merchant millers disposed of all our grain bags to one party, who rents them to the farmer at one-fourth of a cent per day; and I must confess that a more pleasant and agreeable season I have never experienced, and the millers concur with me in their experience.

The novelty of the arrangement is that about half of the number of grain bags are sufficient to handle the same crop that heretofore would require double the number of bags.

I would be pleased to hear from other elevator men through your valuable journal.

Yours, etc., ED. W. K.

### AFTERSIGHT AND FORESIGHT.

*Editor American Elevator and Grain Trade:*—The Mystic Wharf Elevator Company of Boston has put in eighteen large hopper scales, all of them furnished with the Demuth Check Beams. The Lambert & Bishop Manufacturing Company of Joliet, Ill., has also shown the progressive spirit by having their track and hopper scales furnished with this system.

It would seem an anomaly almost to commend these parties for adopting this simple system of double entry if history had not so often given us examples of the imperviousness of men's minds to simple, common sense ideas.

A few years ago differences in weights were universally attributed to dishonesty in weighing. Since it has been discovered and proved that weighmen make honest mistakes, same as other mortals are apt to do, a number of devices have been invented to the end that mistakes in weighing—so many years a matter of aftersight—should become with us a matter of foresight. But still there are elevator men who seem to prefer a stupid hind sight—possibly because their chief talent is of a recalcitrant nature—they prefer to kick and to be kicked at. Fortunately, however, this class of merchants are becoming conspicuous. No doubt in my mind that three-fourths of your subscribers take your valuable journal for the express purpose of keeping posted on improved methods.

Yours truly, D. A. J.

### IMPORTS OF RICE.

In August we imported 13,136,666 pounds of rice, and 2,916,251 pounds of flour, meal and broken rice, against 7,227,298 pounds of rice and 5,356,203 pounds of flour, meal and broken rice in August last year. During the eight months ending with August we imported of rice 62,799,420 pounds, valued at \$1,230,378, and of flour, meal and broken rice 42,987,317 pounds, valued at \$800,730; compared with 112,963,155 pounds of rice, valued at \$2,440,803, and 57,033,955 pounds of flour, meal and broken rice, valued at \$960,174, during the corresponding months of last year.

From the Hawaiian Islands we imported free of duty in August 806,300 pounds of rice, against 803,200 pounds in the preceding August, and 6,029,500 pounds, valued at \$270,312, in the eight months ending with August, compared with 2,638,700 pounds, valued at \$150,455, in the corresponding period of last year.

We re-exported in August 400 pounds of Hawaiian rice and 1,135,989 pounds of other foreign rice, against none of the Hawaiian article and 588,536 pounds of other foreign rice in the month of August, 1891. For the eight months the re-exports were, of Hawaiian 1,989

pounds, valued at \$112, and of other foreign 7,097,417 pounds, valued at \$146,551, in comparison with 13,967 pounds of Hawaiian valued at \$525, and 6,446,917 pounds of other foreign rice, valued at \$134,289, for the corresponding eight months of 1891.

### FIXING GRADES IN CANADA.

A change has been made in the mode of appointing the board to fix the grain standards. Last year the board was composed of persons selected by the Western Boards of Trade. This year the parties composing the board have been named by the Inland Revenue Department, which department has official control in the matter of grading grain. Last year the board for selecting standards for Western grain was composed of Western men, appointed as stated by the Western boards. This year the Toronto and Montreal Boards of Trade and the Dominion Millers' Association have each been given one representative upon the Western board. The farmers have also very justly been given representation on the board. The board will meet at Winnipeg, as in previous years. Following are the persons appointed to the board: Winnipeg, N. Bawlf (chairman), S. A. McGaw, S. Spink, Brandon, Kenneth Campbell. Portage la Prairie, H. S. Patterson. Regina, J. D. Sibbald. Toronto Board of Trade, H. N. Baird. Montreal Corn Exchange, R. M. Esdaile. Dominion Millers, M. McLaughlin, Toronto. Frank E. Gibbs, inspector at Fort William, and David Horn, inspector at Winnipeg, are also members of the board. The farmers are represented by Chas. Braithwaite of Portage la Prairie, and John Benson of Moosomin.

A good deal of dissatisfaction has been expressed with the grading and standards of last year. This will always be the case. It will be found simply impossible to please everybody in this matter. Sellers will find the grading too severe, and buyers will complain that it is too low. Last crop was a most difficult one to grade, and it is therefore not surprising that there were more complaints than usual. As the farmers now have a hand in fixing the standards, a sentimental reason at least for grumbling on their part will be removed, and the same remarks will apply to Eastern buyers, who are now represented on the Western Board. The new grades of "regular" wheat fixed last year have given great dissatisfaction on account of the name, and not without a good reason. The word "regular" should be dropped, or if continued, it should be applied to a different quality of grain, and not made use of in grading damaged stuff.—*Winnipeg Commercial*.

### ATTACKING GRAIN MEN FOR POLITICAL PURPOSES.

It is startling to think that editors of newspapers, who are supposed to be men of principle, can stoop so low as to publish the rot that has appeared in papers of the Northwest during the last few weeks. The following is taken from an editorial published in the *Sun* of Duluth:

We have no grain markets now; there are simply places to unload and take what Frank Irons decrees the agents shall pay. The railroads are back of Irons. The — propose to give the farmers a real market; an old time one, with competing buyers, who come to meet the farmer, instead of as now, waiting like spiders in the web, for the farmer to come to them. But this means a hard fight. The elevator interests are rich. They have wide-reaching connections. They will not give up their money-making combine without a stout struggle. To overthrow them there is needed first, a legislature of honest men, next of intelligent men, next of courageous men; but first of all, honest. \* \* \* \* Elect — governor and an honest legislature and our farmers will again have the old-fashioned, open, competitive markets for their grain. The path of escape from the combination which now masters them is only in this direction.

Barley amounting to 9,934 bushels was imported in August, against 500 bushels in the preceding August; and during the eight months ending with August 904,551 bushels was imported, compared with 942,627 bushels during the corresponding period of 1891. Of foreign barley we re-exported in August 5,000 bushels, against none in August, 1891; and 86,505 in the eight months, against 311,038 bushels in the corresponding months of 1891.

## Queries and Replies.

Questions and answers are inserted under this head free of charge and all are invited to avail themselves of this column.

**No. 5. Compulsory Inspection of Grain.**—Can any reader of the AMERICAN ELEVATOR AND GRAIN TRADE inform us at what points grain inspection is compulsory? Is it state or exchange inspection?—F. E. & M. V.

**No. 6. Remedy for Weevil.**—Will you kindly tell me, through the AMERICAN ELEVATOR AND GRAIN TRADE, how to get rid of weevil in wheat, and how to renovate a grain elevator.—NEW SUBSCRIBER. [It would be well to thoroughly clean the house, sweeping out all corners and bins, cleaning all elevator sinks and legs, and applying bisulphide of carbon, advertised in this issue. See extract from bulletin of Oregon Agricultural College, published elsewhere in this issue.—ED.]

**No. 7. Black Weevil.**—This morning while looking over the different bins we found a worm and what we term a black weevil, a sample of which we send you today. These were found in our warehouse in grain stored last year. Please state in your next issue what they are called and their various forms.—GRAIN DEALERS. [The specimens received are the *Calandra oryzae*, or Black Weevil. It hatches from the egg into a worm-like larva, this develops into the pupa and this into the full-fledged weevil.—ED.]

### GRAIN ELEVATORS IN RUSSIA.

In the year 1891 there were in all 38 elevators at work and two in course of construction in Russia, distributed as follows:

On the Southwestern Railway.....	11
“ Kharkof-Nicolaieff Railway....	10
“ Vladikavkas Railway.....	11
“ Riazan-Kozloff Railway.....	4
At Libau, in course of construction....	1
On the Baltic Railway, in course of construction.....	1
At the new port of St. Petersburg ....	2 floating.

In addition to these it was proposed to erect 22 more at the following points: Rybinsk, Nijni Novgorod, Kazan, Simbirsk, Samara, Saratoff, Penza, Syzran, Morshank, Kursk, Kirsanoff, Borisoglebsk, Sergievo II., Orei, Verkhovie, Kharkoff sumy, Lozovaya, Byk, Kamenskaya and Tokarevka. A sum of about £2,000,000 sterling was assigned by the committee of the relief works for the construction of these elevators.

The reputation in European markets of Russian grain, especially of wheat, having suffered considerably of late years in consequence of the adulterated and otherwise unsatisfactory state in which it is shipped at Russian ports, the whole question has been studied by the Ministry of Finance, with the result that it has been decided in principle to establish a regular classification of grain with fixed standards of quality. At the same time the grain shipped is to be subject to government inspection.

The whole question still remains within the domain of projects. Desirous though this classification and inspection of shipments of grain may be in principle, it is generally felt by those employed in the trade that if these processes be made compulsory more harm than good will ensue; so far as inspection is concerned the proceeding will partake of the nature of a brack. On the other hand, should both the classification and inspection be optional matters will remain as they were. In view of this the solution of the question of placing the grain trade of Russia on an honest foundation is attended with no small obstacles and difficulties.—*Extract from British Consular Report*.

Smith's Pneumatic System of Storing and Transferring Grain will be exhibited at the World's Columbian Exposition.

If the selling of produce by any other than the actual owner of the property at the time of sale, or his agent, be forbidden by law in the United States there would at once be a transference of the business across the Atlantic, and with it would flow no inconsiderable amount of capital, part of which is foreign money now invested in the business here.



### ADMIRER A WHEAT CROP.

"It's the smart fellow who gets along these days," said one of a trio of gentlemen sitting in the lobby of the Tacoma Hotel. "The smartest fellow that I can recall made his mark down in Minnesota. He was out of work and was going about the country leisurely seeking employment and taking every precaution to guard against finding a job. Yes, he was a tramp. He had been knocking through the country in an aimless manner. He hadn't a penny, and had missed a drink for twenty-four hours. One very warm day early in the fall he was passing through a wheat belt in the state referred to. There were acres and acres of land covered with fine wheat, which grew as thick as the land would permit. The tramp had not lost all appreciation of a good thing when he saw it, and so he leaned against the old, dilapidated wooden fence, gazing with unconcealed admiration on the big wheat crop. He also had something else in mind besides admiration, as subsequent events proved.

"He rested awhile and then resumed his journey. He made it a point to institute inquiries about the owner of the field of wheat, and succeeded in ascertaining that the wheat covered about six square miles of land and that the owner lived at the northeast corner of his property and had gone to town on business, which would detain him about ten days. The town was about 14 miles north of the farmer's residence, and the tramp was at the other extreme end of the property. A mile down the road was a small railroad station, which was only in use during the shipping season. Eight miles further south was a telegraph office, which was also located at the junction of the main line of the Northern Pacific Railroad. Thither went the tramp, and soon he had a message going over the telegraph wires. Next day there was a small army of men at work in the wheat field, and earload after earload was taken away. The little branch railroad was all activity. The tramp superintended the work and—well, before the farmer returned home the tramp had sold all the wheat and cleared out with a fortune."

### SHORTAGES IN RAIL SHIPMENTS.

In a recent communication to the *Commercial* of Winnipeg, J. L. Spink, the well known miller and grain merchant of Toronto, Ont., wrote as follows:

"In your issue of August 1, under the heading, 'Shortage in Wheat,' you say in effect that Eastern millers never report any overweight in cars of wheat, but always claim allowance for shortages. This is a very serious stricture, it seems to me, to apply in general terms against all millers in Ontario and Quebec. I would very much regret to learn that this was generally true as applied to millers in Ontario and Quebec. If true, even in regard to any considerable number of millers, it indicates a feature in the trade that must result in injury, and in the end loss to the innocent millers as well as the guilty. Where the distance is so great, requiring transportation over 1,400 miles, there would be no safety to the Eastern millers in buying Manitoba grain if out-turn of cars were not guaranteed. On the other hand, every miller should value this concession made in their interest by the Manitoba shippers, and adopt the most exacting rules and regulations to avoid waste, errors or mistakes in the unloading of cars, and promptly report outturn of all cars and pay for all overweight. The Manitoba shipper, in guaranteeing the outturn of cars places the miller (in many cases a man unknown to him and an entire stranger to him) in a position of trust as his agent to honestly and faithfully weigh out the contents of cars and promptly report the outturn as he finds it.

"I feel assured there are a very large number of millers who promptly report outturn of all cars and gladly pay for all overweight. I trust, therefore, you do not intend to make the charge of dishonesty apply to all millers. I am, however, free to confess that, if the Winnipeg dealers and shippers find any miller or millers receiving any considerable number of cars and have none reported as overweight, they have valid ground for complaint.

"At my own mill it is a standing rule to report the exact outturn of every car at this office as soon as unloaded; if outturn has not varied over one bushel, under or over the weight invoiced, I make no claim for shortage and pay no overweight, accepting car correct as invoiced to me by shipper. But on every car unloaded where shortage is more than one bushel, I claim the whole shortage, and on every car unloaded where overweight is more than one bushel I pay for the whole over-

weight. Working under this rule for more than 20 years I have found by experience that about 40 per cent. of cars weigh out correct as invoiced, about 45 per cent. are more or less short, and about 15 per cent. are more or less overweight; some years the overweight nearly equals the total shortage. I might say there is no cartage at my mill; the grain is elevated out of cars direct over scales and weighed off in about 85-bushel draughts.

"Taking the past year, Sept. 1, 1891, to date, I find total number of cars received from various points in Ontario and Manitoba and unloaded at my mill was 260 cars; the record stands on this lot as follows: One hundred and five cars weighed out as invoiced to me; 109 cars were short a total of 758 bushels; 46 cars were overweight a total of 367 bushels. I claimed this shortage from the shippers and paid this overweight to the shippers. The four cars showing the greatest shortage was 58 bushels, 56 bushels, 54 bushels, 37 bushels. The four cars showing the greatest overweight was 70 bushels, 49 bushels, 20 bushels, 18 bushels.

"I should say in closing that I have found where cars are short or overweight coming from Manitoba and the Northwest, the quantity of grain short or overweight is usually very much more than on cars from Ontario points, indicating less care in loading, or possibly not as good facilities for correctly weighing the grain."

### DRIVE ROPE COUPLING.

The increase during the three or four last years in the number of rope drives used in grain elevators has been remarkable and the prospects are that the demand for this style of drive will continue to increase. With the use of this drive come new difficulties. That of fastening the ends of the rope together is not the least. A correspondent of *Power*, who has successfully accomplished this has the following to say regarding it:

We have a little something to tell about our rope drive. Not so much about the drive, or the rope, but about the way we have of fastening the ends of the rope together.



Ours is a  $\frac{3}{8}$ -inch braided cotton rope which cannot be spliced. We use a coupling consisting of a short piece of copper tube, into one end of which we insert one end of the rope, putting it in about half way. A groove is then compressed around the tube and rope, with a tool made for the purpose, the open end of the tube is filled with sealing wax and heated till the wax boils, then the other end of the rope is inserted and the tube compressed so that the coupling has the shape shown in the accompanying sectional view. The molten wax fills the ends of the rope, making a solid mass between the compressed parts. When the wax cools, of course, the whole thing is hard and solid, and the rope is ready for use.

At this place (Rockford, Ill.) we have had four of these ropes running to the fourth floor two years, and twelve ropes running to the third floor, with these couplings and without a break. We have drives of six ropes each transmitting power from 4-foot pulleys on the engine to 21-inch pulleys on the dynamos, about 8 feet between centers of pulleys, using these couplings, and never had them pull out when we use wax in them.

Agents are now writing in elevator and lumber policies, where the elevator or lumber is situated on the right of way owned by a railroad, the following clause: "It is agreed that in case of loss under this policy no claim shall be made by this company for itself or as assignee of the assured against the said railway company for having by any act or omission caused the fire whereby said loss may occur." This clause prevents the companies taking subrogation from the assured.—*Investigator*.

"While rice is white," says a commission merchant, "the size of the grain varies greatly, according to the locality where it is raised. I have seen the grains as fine as any grains of mustard almost, and again it is nearly as large as beans. As for taste, it is all about alike, but the amount of cooking depends altogether on the size of the grains. It takes an artist to cook rice properly. You have noted the occasional black grains. Well, that is what is called hot rice, and is so discolored by being overheated in the process of milling.

### A PROTEST, A PETITION.

To the Traffic Managers of Railroad Companies:

We, the undersigned grain dealers, having been caused much trouble by unreasonable delay of grain in transit and also much loss by enforced idleness of capital invested and by depreciation in value of grain during delay, do hereby protest against such unreasonable delay and petition you to provide facilities sufficient to enable you to promptly transport grain at all times.

We also protest against the one-sided and therefore unfair charge for delay, and petition you to allow the delay of grain in transit to be governed by the same rules as govern the delay of cars on the line where the grain is delayed.

Name.....

Address.....

Name.....

Address.....

Name.....

Address.....

We have received copies of the above signed by the following firms:

Gregg Bros.' Grain Company, St. Joseph, Mo.  
F. H. Deane & Co., Richmond, Va.  
W. S. Sturgeon, Heyworth, Ill.  
Downing & Blaesser, Hawarden, Ia.  
B. B. Connor & Co., Louisville, Ky.  
J. Kremer & Co., Arcola, Ill.  
Hunt & Booth, San Antonio, Tex.  
Brown & Co., Lovington, Ill.  
I. W. Sawin & Co., Loxa, Ill.  
J. H. Wilkes & Co., Nashville, Tenn.  
V. E. Chamberlin, Powell, Neb.  
Geo. W. Eckert, Allentown, Pa.  
Z. H. Travis, Reese's, O.  
C. H. McCoy, Lovington, Ill.  
W. Pickens, Daykin, Neb.  
Vannah, Chute & Co., Winslow's Mills, Me.  
C. H. Howard, Allentown, Pa.  
Kremer & Winkler, Arcola, Ill.  
W. D. Bettis, agent for Hunt & Booth, Orange, Tex.  
Thomas Bros., Sheffield, Ia.  
Vannerson & Co., Augusta, Ga.  
W. H. Randerson, Winnebago, Ill.  
N. A. Duff & Co., Syracuse, Neb.  
Dawson Blackman & Co., Cincinnati, O.  
C. D. Sanborn, Cushing, Ia.  
Hunt & Booth, Kansas City, Mo.  
Haworth & Spang, Georgetown, Ill.  
R. B. Delp & Co., Allentown, Pa.  
N. F. Parsons, Winnebago, Ill.  
E. D. Vorhes, Cushing, Ia.  
Warner & Everett, Falconer, N. Y.  
W. L. Sanborn, Modale, Ia.  
I. W. Sawin & Co., Doran, Ill.  
Norton & Son, Tallula, Ill.  
P. K. Jaggard, Disco, Ill.  
A. Groweg, Defiance, O.  
Isaac Otis, Dunlap, Ia.  
J. Gorham & Co., Homer, Ill.  
J. W. Guthrie, Flora, Ind.  
O. B. Knox, Disco, Ill.  
Taylor & Burke, Tobias, Neb.  
A. B. Cohee, Brimhurst, Ind.  
J. N. Gunder, Homer, Ill.  
Milner Bros., Sedalia, Ind.

With this issue we present a few new signers, but not near the number we had good reason to expect and cause to desire. Shippers hang back as though they thought it would have an opposite effect. To such we wish to say that matters can be no worse than at present. If you have the courage to stand up for your own rights you will not hesitate to sign the protest and petition published above. If you have no interest in your business and do not care if shipping facilities continue to grow worse it will not make a bit of difference to you if we fail in securing enough signatures to the petition to help secure the desired reform, and we beg of you to refrain from wasting time in helping us to secure for you what you do not want. The shipper who admits the protest would have considerable influence with traffic managers if all would sign it, and then hangs backward with the excuse that he would sign if others would, is of little use to himself or anyone else. The world needs men of action and we want them to sign the petition. We want every grain shipper to sign it, those who ship large as well as small amounts.

We desire you to sign it and get other dealers to sign it and send it to MITCHELL BROS. Co., 182-186 Dearborn street, Chicago. Please favor us and help yourself by signing immediately.



### THE FRIT FLY.

Professor Luggar, entomologist of the Minnesota State University, has been investigating the causes that have led to the destruction of so much wheat while in the ripening process in the northwestern part of the state this season. He finds that what was supposed to be the Hessian fly is not that insect, but another and more destructive fly, known to entomologists as the "Frit fly," and in some respects similar to the Hessian fly. This little pest mates in the early spring, and the female deposits her eggs at the first joint of the wheat stem. As each female lays about 1,000 eggs on an average, and only one or two in each stem of wheat, from 500 to 1,000 stems will be killed by a single fly.

These eggs hatch small maggots which bore themselves into the center of the stem and destroy the joint. The maggots soon reach full size and turn into a cocoon, which resembles the flaxseed, and they are found over the first joint of the stem. Stems infested by such worms, while they grow to full size, do not head out perfectly, but are still heavy enough to cause breakage at the weak part. By the time breakage occurs the maggots have turned to flies, and thus make their escape through the ruptured stem.

This insect, which is identified by Prof. Luggar, has not previously appeared in this country, at least to any serious extent.

In her "Manual of Injurious Insects," Miss Ormerod, the famous English entomologist, says: "The Frit fly (*Oscinis frit*) is a small, black, shining, two-winged fly, rather under the eighth of an inch in length. 'Legs black, the tarsi (feet) of the hinder pair, with the exception of the end joints, yellow; the fore feet brown-yellow, the midmost often much darker; the wings transparent, somewhat brown at the fore edge.' It is also distinguishable by its peculiar habit of dancing or skipping about, which has been very noticeable in the specimens I have reared. This fly is common in various parts of the Continent, and especially recorded as present in France, Germany and Sweden, where it attacks both oats and barley. With us the attack has, as far as I am aware, been almost entirely confined to oats, and is caused by the maggot feeding in the heart of the young corn plant a little above ground level, and eating away the center, so that the shoot above the eaten part is destroyed, and the damage that is going forward then becomes noticeable from the injured shoots turning brown and withering instead of continuing their growth.

"*Oscinis vastator*, perfect fly, natural size and magnified, and attacked plant with maggot inside. (The *Oscinis vastator* of Curtis bears such a strong resemblance to the *Oscinis frit*—even if it is not absolutely the same—that I have used Curtis' figure to give the appearance of the insect and its method of injury.)

"The maggot is about the eighth of an inch long, whitish, legless, cylindrical, bluntly pointed at the head end, which is furnished with a strong pair of curved mouth hooks, and on each side near the head it has a branched spiracle. At the blunt hinder extremity it has two projecting wart-like spiracles.

"The chrysalis is rather smaller than the maggot, cylindrical and rather more pointed at the front than at the hinder extremity, which, from the strong projection of the two wart-like processes, has the appearance of being cleft, or almost bluntly forked, and for a time, after the maggot has changed to the chrysalis state, the branched external spiracles (or air tubes) on each side of the head extremity are very plainly observable."

In 1889 Prof. W. McCracken, writing from the Royal Agricultural College, Cirencester, on August 1, observed as follows:

"The frit fly has again been the most plentiful of injurious insects, and, as was the case last year, the degree of injury corresponds to the date of sowing. For example, in one field Black Tartarian Oats (the sort most largely grown here) were sown on March 29, and enjoyed almost complete immunity from attack; in another field sown on April 29, over 70 per cent. of the first stems were destroyed. The plants which had their first shoots killed in this way immediately commenced to tiller, so that the land continued to have a fairly close cover; but the secondary stems were always puny and unprofitable compared with the original ones.

"Early sowing, where possible, appears to me to be an obvious preventive, and a dressing of one hundredweight or so of nitrate of soda, to stimulate the crop to pass

quickly through that stage of its growth when it is liable to attack, is one of the best measures available."

From reports sent in, it appeared that after the maggots turned to chrysalis state, the infested plants (where they had not been destroyed past hope) threw out shoots, so that a crop was obtained, though from unevenness of ripening it was far from what could be wished. This suggests that if a stimulating dressing was applied when the damage is first beginning to show, time enough would thus be saved for a growth which would give a more even crop. The nature of the dressing will be best judged of by agriculturists themselves; but in a series of experiments on oats it has been found now for some years that sulphate of potash or a mixture of sulphate of potash with sulphate of ammonia and phosphates, answers exceedingly well in bringing on a healthy crop.

Where the crop cannot be saved, it is highly important so to treat the surface of the land that the maggots or chrysalids may be destroyed, which (if nothing is done, or the surface only lightly stirred or cultivated for another crop) will almost certainly produce a new brood of flies to continue infestation. For this purpose plowing with a skim-coulter attached, so as to bury the infested surface well down would be about the best treatment.

Looking at the point that in Sweden and Bohemia respectively, the maggots of the summer brood have been found feeding in ears of barley and among the grains in oat heads, it appears so far possible that infesta-



THE FRIT FLY.

tion may be imported in chrysalis form amongst the grain as to make it worth while to examine it, and if the little reddish brown chrysalis cases should be observed, to pickle the grain. For general appearance of the maggots and chrysalids of the frit fly as seen with the naked eye, those of the wheat bulb fly may be taken as examples, and the method of injury to the young plant from the two attacks appears to be indistinguishable.

### A POLITICAL STORY.

This is a story I heard the other day about the virtuous Minnesota wheat elevator men: A number of Chicago Board of Trade men, together with several members who are not residents of Chicago, arranged a little corner in wheat out of which they calculated they would make a pretty penny all around. Everything was going well when the unexpected, which has a way of happening, smashed the corner and left each one of those who had anticipated profit with a large deficit. This is how it happened: A man who had charge of one of the great Minnesota wheat elevators—whose principal, by the way, were interested in the corner—when the thing was well under way turned a hundred thousand bushels of wheat on the market for a dollar a bushel. Naturally, his employers were very wroth and demanded that he at once account for every bushel of wheat that was scheduled for the elevator in his charge. He replied that he was quite ready to do this, and that every bushel of wheat that had been paid for by the company was in the elevator. As the hundred thousand bushels that he had sold was what had been stolen from the farmers there was nothing to be done but discharge this sharper of sharpeners and let the matter drop.—*Chicago Post*.

If the unprincipled sheet quoted knew how improbable, nay impossible, it is for such a thing to occur, it would be easier for it to understand that in publishing such lies it is making a libelous attack on honorable men.

Cottonseed meal is now being bought by Missouri cattle feeders, it being cheaper than corn at \$2 a barrel. At the same time Missouri is shipping corn to the cotton country.

### A WARNING AGAINST WET HAY.

The damage to baled hay from becoming wet while being brought to market from the farm does not seem to have been fully measured; especially by the farmer, who will say that the weather was clear when he left home, he had but a slight shower while on the road, and only the top tier of bales are a little wet, but not enough to injure them. This may be true from his point of view, as probably the water has not penetrated the bale to exceed a quarter of an inch, which would quickly dry off and not injure its feeding qualities. The dealer receiving the wet hay will revolve the question of what is best to do over in his mind several times and finally decide that it was the fault of no one but the rainmaker, and then load the hay into ear or storehouse, where it may come in contact with goods that have come in in good order and possibly from the same farm. These goods may remain in this condition for several days, with the result that he has not only got the few bales that were on the top of the load, that were not wet enough to do any harm, but he may have twenty or more bales that may have their selling quality injured from stain or change of color to the extent of from two to five dollars per ton, and it may not end with these few bales. When the car gets to market a dealer comes along and buys it at a good price. When he breaks into it and finds a few of these bales that did not get wet enough in the country to do them any harm, he stops business at once and says: "There is something wrong about this car of hay. I don't want it; it is not what I bought; some of it shows wet or stain and I am afraid it is all alike;" and no amount of explanation will convince him to the contrary. He leaves it and buys elsewhere. Later on, another buyer comes along and the broker will show him the same car, and he will say: "I saw this car marked sold this morning; why is it that the party did not take it?" And this may occur again and again during the day, and probably to-morrow it may have to be sold for a dollar or two per ton less—just because a few bales crept into the car that were not wet enough to do any harm. But it has cost the dealer ten or twenty dollars which could have been avoided by the trifling expenditure of a few dollars for a wagon cover, which every farmer ought to have, or the dealer have for him. In either case of ownership, it would soon prove itself to be one of the best investments ever made. There seem to be a thousand and one small leaks in the hay trade, and this is one of them that it would be well to look after.

When the hay gets to the city market, no dealer thinks of sending it out without its being fully protected with a cover, for he knows full well that should it get wet it will be returned to him. No excuse in regard to the rainmaker will do in this case; but he must stand the loss caused by his negligence. The dealer provides his storehouse; the steamboats or barge lines their covered boats; the railroad companies dry cars, also good stores at their terminals for the protection of the goods from the elements. The only missing link seems to be between the farmer and the receiver's hands. When this is connected you have remedied that which has cost an unknown amount. This has cost the writer money to learn, and probably every one in the hay trade has had the same experience.—*Hay Trade Journal*.

### HAY WANTED IN GREAT BRITAIN.

Regarding the British hay question, Mr. H. Kains Jackson in the *Mark Lane Mail* says: "The farmers' worst loss in 1892 is probably that of the shortage in the grass and forage crops, because of the large area over which deficiency was suffered. This loss, probably, will be a little reduced by increased price upon the quantity sent to market, but as many farmers require every truss of clover and hay produced on their occupations, the net loss through the small yield will be very serious. Already the enterprising foreigner is forwarding compressed hay to the United Kingdom, to share in the good prices being realized. While the grass deficiency in value is about equal to the entire value of the whole wheat crop, yet it is again hard on the wheat grower that his small acreage—this season, only 2,219,839 acres for Great Britain—should still be likely to fall short of an average, and that the price for the quantity grown should yet be unimproved by its deficiency. Of wheat, plenty can be imported, so price remains debased. Of hay a foreign supply may be stimulated by £4 to £5 per load, but the country is not likely to be swamped."



## CROP : CONDITIONS.

OREGON, WASHINGTON.—Estimates place the yield for 1891-92 at 3,000,000 bushels below that for the preceding season.

CALIFORNIA.—While the weight of wheat is in some cases unsatisfactory there will be undoubtedly more than last year.

KANSAS.—The secretary of the Kansas Board of Agriculture gives the yield of wheat in that state at 74,538,906 bushels, and of oats 43,722,484 bushels, and estimates the corn crop at 140,000,000 bushels. The latter is smaller than parties who have been over the state recently make it.

SEEDING IN ILLINOIS.—In the Northern and Central divisions wheat seeding is nearing completion, and in many counties it is beginning to come up, but needs rain. In the Southern counties the continued drouth has badly retarded this work, owing to the hard and dry condition of the ground.

INDIAN TERRITORY.—The corn on the uplands is good, but the crops in the bottoms that were overflowed are light. The replanting of the flooded lands was too late to develop full stalks and ears. Wheat sowing is now in progress. About double the number of acres will be sown as compared with last year's sowing.

CORN IN INDIANA, OHIO AND MICHIGAN.—The yield will probably be a little over 60 per cent. of an average. The same conditions with regard to the corn crop exist in Ohio as are reported in Indiana. The prospects are, from present appearances, that Ohio will not make an average crop of corn. Michigan does not raise much corn for export. It is now nearly all safe and ought to make nearly three fourths of a crop of corn.

MICHIGAN.—The Michigan monthly crop reports for October, issued October 11, estimates the wheat crop for this year at 24,140,767 bushels. The total number of bushels reported marketed by farmers in September is 1,692,835 bushels. The total number of bushels marketed in August and September was 3,052,172 or 512,183 bushels less than for the same months last year. Oats average for the state 29.29 bushels per acre, and corn 52 bushels of ears. Frosts have been deferred, which has greatly helped late potatoes. Potatoes are estimated to yield 58 per cent. of an average crop in the state.

WHEAT IN MANITOBA.—A brisk movement has now set in in deliveries by farmers at Manitoba country markets. A number of points were receiving from 2,000 bushels per day upward to 6,000 and 7,000 bushels at some markets. Farmers' deliveries are not general yet at all points, but total aggregate receipts were estimated at 50,000 to 70,000 bushels per day. The car lot movement has not reached this proportion yet, and amounted to about 50 cars per day. Considerable wheat placed in country elevators has gone in on store on account of farmers, and there will, no doubt, be a wide disposition to hold for higher prices.—*Winnipeg Commercial*.

IOWA.—The Iowa crop bulletin says: Hot, dry weather has matured all crops. Early planted corn on well drained fields is nearly dry enough to crib, and the quality is fully up to the average. The total yield will fall below the average by the reduced acreage, and the unfavorable conditions attending planting and cultivation in fields subjected to an excess of moisture. The prevalent drouth has seriously cut short pasturage, which will necessitate early feeding of stock. It is also injurious to winter wheat, of which a greatly increased acreage has been sown. Potatoes will be less than half a crop. All reports of threshing show light yield and weight of oats.

NORTH DAKOTA.—The North Dakota weekly crop report says: Practically the same weather conditions prevailed during the past week as were experienced during the two preceeding weeks—warm and dry with abundance of sunshine. No rain has fallen within the state since September 17, excepting a few light showers in a few localities. The temperature during the same period has been abnormally high, during the past week averaging at the Bismarck station 14 degrees above the normal. As a result of these fine conditions the harvest is nearing completion. Shock threshing is about finished, and stack threshing fairly started. Fall plowing is general, but owing to the absence of rain, the ground is becoming hard, making that work difficult. Pastures in the eastern portion of the state are also badly in need of moisture.

The warm weather of the past three weeks has brought the corn crop to maturity and is now in a condition to be safe from injury from frost. The correspondent at Cashel, Walsh county, states that considerable of last year's wheat is being threshed and is found to be in good condition.

KANSAS.—Secretary Mohler of the Kansas State Board of Agriculture reports that the total yield of winter wheat is 70,035,980 bushels; spring wheat, 4,502,926 bushels; oats, 43,722,484 bushels; rye, 1,042,613 bushels, and of barley 13,842,954. It is yet too early to give a final estimate of the Kansas corn crop, but the probable yield is placed at 140,059,929 bushels.

GRASSHOPPERS IN MISSOURI.—Millions of grasshoppers have made their appearance in Buchanan and adjoining counties, and the wheat crop threatens to be a total failure in consequence. The young blades of wheat are eaten off so close to the ground that it dies at the root, and in many cases the fields have already been plowed under. The continuous warm, dry weather has hatched out young hoppers until the fields are brown with them, and unless a cold rain or frost kills them off much damage will be done. Fourteen counties in Missouri report to the State Secretary of the Board of Agriculture that the insects are so numerous that they are causing alarm to the farmers.

CORN IN ILLINOIS.—The Illinois state crop report for the past week says the continued perfect weather has greatly advanced the late corn, so that, except in a few localities, it is practically beyond danger from frost. The early planted is being gathered and much of it is already in shock. The reports indicate that the yield will range from 50 to 67 per cent. of an average crop, while in some localities, where the grain was planted early and under favorable conditions, especially on high and well-tilled ground, the yield will be much greater. The most discouraging report comes from LaSalle county, the correspondent stating that it is doubtful whether more than 25 per cent. of an average crop will be secured.

WINTER WHEAT SEEDING.—Prime says: The seeding season of 1892 opened under most favorable circumstances. We had good rains early in September and also through the month, which put the ground in good condition for plowing and seeding. The result was that excellent headway was made and fully three-fourths of the crop got into the ground early and in good shape. Then, however, the tables were turned and dry weather commenced, and with the exception of some limited areas seeding at the present time is at a standstill and the farmers are waiting and watching for rain. There seems to be also quite a development of insect life, as the surroundings are favorable for their growth and increase.

GOVERNMENT REPORT ON CORN.—The October statistical returns for the Department of Agriculture make the general condition of corn 79.8, against 79.6 for last month. The absence of frost has been favorable to the ripening for late and immature areas. The temperature for the last week in September was especially beneficent. During the past ten years there were three, 1883, 1887 and 1890, which reported worse conditions in October and made a yield of 20 to 22 bushels per acre. The range of yields for ten years has been from 20 to 27 bushels per acre. The present condition indicates a yield below the average. The state averages for commercial belt are as follows: Ohio 80, Indiana 77, Illinois 71, Iowa 79, Missouri 82, Kansas 70, Nebraska 78. Only the figures of Ohio and Missouri are up to the general average.

GOVERNMENT CROP REPORT.—The October report of the Statistician of the Agricultural Department gives the state averages of the yield of wheat per acre ranging from 6 to 22 bushels, and average 13 bushels. The averages of the principal wheat growing states are as follows: New York 14.3, Pennsylvania 14.4, Texas 12.3, Ohio 13.2, Michigan 14.7, Indiana 14, Illinois 14.7, Wisconsin 11.5, Minnesota 11.7, Iowa 11.5, Missouri 12.1, Kansas 17, Nebraska 13.5, South Dakota 12.5, North Dakota 12.2, Washington 18.4, Oregon 15.7, California 12.8. The average yield of oats is 24.3 bushels. The last report of condition was the lowest in ten years, that of 1890 excepted, the average being 64.4, against 78.9 this year. The average for estimated state yields of rye is 12.7 bushels. Condition of potatoes has declined during the past month from 74.8 to 67.7. More or less rot has been reported in the Atlantic states. In Michigan tubers are generally small on account of drouth. Low condition is general in the Eastern, Middle, Central and Western states. It is best in the Rocky Mountain region and the South, where

the crop was gathered early in the season. Condition of buckwheat has declined since the last report from 89 to 86. It is 83 in New York and 90 in Pennsylvania. The condition of tobacco has improved 3 or 4 points, now averaging 83.

CORN.—The Cincinnati *Price Current* estimates the present corn crop at 1,610,000,000 bushels. There will be left over of old crop November 1 about 235,000,000 bushels, making an aggregate supply of 1,845,000,000 bushels. The estimated consumption for the 1891 crop is 1,750,000,000 bushels, and with say 80,000,000 of exports, the amount used would be 1,830,000,000 bushels to go up to November 1. We will have then, according to estimates, a surplus on Nov. 1, 1893, of 15,000,000 bushels after consuming as much, and exporting as much as we will in the present season, to end Nov. 1, 1892. The average annual consumption of corn for this country is put at 1,735,000,000 bushels for the last seven years.

BARLEY IN ONTARIO.—The barley crop of Ontario has shown a marked decrease this season, owing to the effect of the McKimley Bill in depreciating values on this side of the line. Farmers theretofore determined to grow less, and now refuse to sell at present low prices. Brewers, on the other hand, are expecting to get their barley for even lower rates than they paid last season, and one or the other side will have to give in before long. Some very fine Ontario samples have been shown us of late, but they are held at too high prices to admit of business to any extent. Feed barley has been sold of late at 36 cents to 42 cents as to quality, and choice feed at 43 cents to 44 cents. Malting grades have sold at from 48 cents to 55 cents as to quality.—*Montreal Trade Bulletin*.

WISCONSIN.—The Wisconsin state crop report for the past week says the temperature during the week has been much above the normal, but the rainfall was greatly deficient, and some farmers are waiting for rain to soften the ground before completing their fall plowing. Late crops are about all gathered and much threshing has been done, so that an intelligent estimate of the season's product can now be made. All cereals are probably below the yield of last year, unless it be corn, and opinions seem to be general that while the yield is not fully up to the average it will equal that of last year. Tobacco, hay and buckwheat have been the most successful crops of the season, tobacco and hay not only being great in yield but of excellent quality. Potatoes have greatly disappointed early expectation. Waupaca and Portage counties report large yields, but in nearly all other sections of the state they are light with much loss by rot. A good crop of buckwheat has been secured. In the north central counties a few fields were nipped by frosts in September, but not enough to affect the total yield. Winter wheat and rye are growing finely and will enter the winter season in excellent condition.

## EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from Atlantic ports during the two weeks ending October 8, as compared with same weeks last year, have been as follows:

	For week ending Oct. 8. Oct. 10.		For week ending Oct. 1. Oct. 3.	
	1892.	1891.	1892.	1891.
Wheat, bu . . . . .	2,022,000	3,042,500	1,874,000	2,008,300
Corn . . . . .	622,000	543,700	491,000	1,335,100
Oats . . . . .	2,185,000	50,700	332,000	68,700
Rye . . . . .	59,000	649,200	93,000	666,700
Flour, bbls. . . . .	374,500	194,200	342,000	286,000

"A Protest, A Petition" merits the approval of every grain shipper.

New corn is beginning to come to market in Kansas. Several loads at Seneca in that state have been sold at 35 cents.

Broom corn valued at \$6,136 was exported in August, against \$4,234 worth in August, 1891; and in the eight months ending with August \$74,396 worth was exported; compared with \$123,529 worth in the corresponding months of 1891.

Flaxseed amounting to 46,794 bushels, valued at \$55,459, was imported in the eight months ending with August, against 548,540 bushels, valued at \$649,170, in the corresponding period of 1890. In August, 1892 and 1891, none was imported.



## Trade Notes.

Baldwin Bros. are building a fanning mill factory at Grand Forks, N. D.

The Computing Scale Company has been incorporated at Chicago with \$50,000 capital stock.

The Cockle Separator Manufacturing Company of Milwaukee, Wis., is now prepared to supply the trade with Morgan Oat Clippers. Their advertisement is published in this issue.

The Chicago Belt Fastener Company has been incorporated at Chicago. The capital stock is \$25,000, and the incorporators are Peter Thacher, Harry M. Gardner and Robert S. Hill.

An electric alarm has been invented to indicate when grain bins are full. The apparatus consists of an electric battery, a bell and a diaphragm placed in the bin at a distance of about eighteen inches from the top. The weight of the grain compresses the diaphragm, which starts the bell to ringing and it continues ringing until the current is cut off by a switch provided for the purpose.

During the last few years many elevator men have added feed grinding outfits to their elevator equipment. Some are grinding rye, buckwheat and cornmeal as well. The demand for a mill that will meet the requirements of the elevator men has been continually increasing, and The Edw. P. Allis Company of Milwaukee, whose advertisement appears in this issue, is now prepared to supply it.

Merchant & Co. have our thanks for a kind invitation to visit their works. They say: "We have stopped entirely the importation of our three grades of 'guaranteed roofing plates,' and are daily demonstrating to our satisfaction that we can produce better results than we ever obtained abroad. Knowing men 'believe their eyes before believing their ears,' so we cordially invite you to visit our works, 2025 Washington avenue, Philadelphia, and see produced the finest and best plates every offered the American public."

The Stevens Manufacturing Company of this city are showing at the fair the Stevens Separator, Scourer and Smutter, a machine which embodies all the best known features found in grain-cleaning machinery of its kind. It runs lightly, works to perfection and is built very strongly and solidly and will last for years. One great advantage possessed by this machine is its simplicity and the ease with which it is operated. Another of the Stevens Manufacturing Company's special machines is the Stevens Brush End Cleaner and Finisher, the only machine on the market that will successfully remove every particle of fuzz and blossom from the ends of the grain. This machine is made with one or more disks, the faces of which are interchangeable, and made of cast steel. It is acknowledged by all competent judges that this machine fills a long felt want. The Stevens is a thoroughly Peorian institution; the implements and machines are manufactured right here and the business is operated by Peoria capital. The business of this company has so rapidly increased that they are seriously considering the advisability of increasing their capital stock with a view to doubling the size of their works. In addition to the two above mentioned machines the Stevens Company also manufactures elevator separators, warehouse separators, milling separators, bran dusters and mill and elevator machinery, etc., smut machines, wheat ending machines and the celebrated oat clipper, which is the simplest and best machine of its kind.—*Journal, Peoria, Ill.*

The largest gasoline engine ever built is now running in the big grain elevator of Messrs. Taylor Bros.'s at Cooper's Point in this city. The machine, which was manufactured by H. W. Caldwell & Son Co. Chicago is a marvel of mechanical compactness and power. In the small space of 7x12 feet this giant puts forth a strength of 75 horse power, while the largest gas engines heretofore built have not exceeded 35 to 40 horse power. The engine is run on gasoline stored in a tank at some distance from the engine and below its level, so that in no case can oil flow to the engine excepting when running. The charge in the cylinder is controlled by a governor and measured to a nicety, while the ignition of the charge is effected by a tube ignitor. This tube is incased in a small iron chimney lined with asbestos and heated by

means of a small gasoline Bunsen burner, with a flame so small in comparison with the power of the engine as to seem ridiculous. By the expansion of the gasoline in the cylinder when ignited the piston is driven and the two heavy flywheels kept in motion, and the engine's immense power is exerted without a sound other than the whirr of the wheels. The starting of engine is simple in the extreme. While other large gas engines built heretofore have required a small auxiliary gas engine, this monster is set in motion by means of a small hand pump by which the first charge of gasoline is forced into the cylinder and exploded by a simple detonator also operated by hand. The engine is the latest advance in gas power in which Mr. J. A. Charter, the inventor, has simplified the mechanism from the twin cylinders to the use of but one cylinder. Mr. Charter is here in person to superintend the erection and operation of the engine. The cheapness of running the new engine is remarkable. It consumes but three-quarters of a gallon of gasoline per horse power per ten hours, or requiring an expense of  $\frac{3}{4}$  of a cent per horse power per hour. The engine was in operation this morning and the intricate machinery of Messrs. Taylor Bros.'s big elevator was being run with ease. When the size of elevator is understood the power evolved from a small explosion of oil may be better realized. The new elevator proper is 40 feet wide by 90 feet long and 78 feet high, with a storage bin capacity of 90,000 bushels of grain, besides an annex of 40 feet wide by 110 feet long, sufficiently large to store 425 tons of sacked feed. It is equipped with the most modern mechanical appliances for elevator purposes, and is a model in the warehousing line of which the city may feel proud. The enterprise of Messrs. Taylor Bros. in being the first to practically use the largest gas engine in the world in Mr. Charter's invention will receive wide notice from scientific men.—*The Post, Camden, N. J.*

## WATERWAYS

A grain blockade is beginning at Buffalo. Canal boats and railroad cars are scarce.

The Northern Queen with Duluth wheat was found 500 bushels short at Buffalo recently, it is reported.

The Saginaw Valley, the Rosedale and the Myles overran respectively 100, 117 and 164 bushels when unloaded at Buffalo recently.

A number of Canadian vessels which usually trade to ports on Lake Superior are taking grain from Chicago to Kingston at  $4\frac{1}{4}$  cents on wheat.

A state canal convention will convene at Buffalo, N. Y., October 19. All organizations of citizens and cities, towns and villages are entitled to send delegates.

An astonishing shortage of 757 bushels is reported in the wheat cargo of the steamer Folsom, recently unloaded at Buffalo. This cargo was shipped from Chicago.

Ropes Pass is a new deep water entrance to the harbor of Corpus Christi, Texas, now being improved by the Ropes Pass Company. A depth of 30 feet is contemplated.

The Suez Canal directors have made a reduction in the tolls of one-half a franc (10 cents), taking effect Jan. 1, 1893. Indian wheat can then be delivered in Europe so much cheaper.

At Chicago recently the schooner Naiad was loaded with oats, but when completely filled was 2,000 bushels short of its usual cargo on account of oats being unusually light this year.

A steam canal boat has been launched by G. W. Hall at East Lockport, N. Y., which has for its propelling mechanism a pair of overshot wheels. Great speed is expected of this new idea.

The Erie Canal is transporting much grain and flour this fall at 4 cents on wheat to New York. The railroads have more than they can handle at 5, but the boatmen make more profit at 4 than the roads do at 5.

Steamers have been engaged, through the efforts of Hon. M. T. Wolverton, to carry grain from Bowdle, S. D., to the Chicago & Northwestern Railway at Pierre and the Northern Pacific Railroad at Bismarck.

The steamer "Little Eagle," which has been running in the Mississippi near Cairo, has been placed in the Missouri River trade and on her first trip loaded 7,000 sacks of wheat at Berlin, Mo., for transportation down the river.

Navigation on the Illinois & Michigan Canal between Chicago and La Salle, Ill., will be closed November 15. After that date boats may be run at owner's risk of being frozen in. The lock at Henry will remain closed after November 20 for repairs.

Montreal's trade with Germany has been curtailed by the withdrawal by the Hamburg-American Steamship Company from all trade to and from Montreal. This action was taken because of the unnecessarily harsh

measures adopted by the local authorities at the time of the cholera epidemic in Hamburg. The ships that called at Montreal will for the remainder of the season trade to Boston, Mass.

The schooner John Burt, with 23,000 bushels of corn from Chicago for the starch factory at Oswego, N. Y., ran ashore on the night of September 25 twenty miles east of Oswego and went to pieces in a heavy northwest gale. The corn was fully insured.

The bar across the harbor of St. Joseph, Mich., is again making trouble, and will probably interfere very seriously with the plan of shipping grain across Lake Michigan from Milwaukee to Benton Harbor, where an elevator has been built expressly for this business.

The steamer Onoko loaded a cargo of wheat at Chicago recently which with the overrun of 113 bushels amounted to 113,829, the largest ever taken out of Chicago, for the W. H. Gileber, which was credited with 113,885, was short 60 bushels at Buffalo, so the Onoko is ahead by several bushels.

The canal steamer Columbia recently cleared from Buffalo with five tows carrying 47,230 bushels of wheat, bound through the Erie Canal and down the Hudson River to New York, the freight charge being over \$1,900. The steamer Acme with three tows recently made the trip to New York and return in twenty-six days.

The lake grain trade between Buffalo and Chicago has of late been more profitable to large boats than the Buffalo Duluth traffic because the boats cannot take full loads through the Sault Ste. Marie Canal. The difference taking grain one way and coal the other amounts to \$1,000 per trip to a vessel that can carry 100,000 bushels of wheat out of Chicago.

A ferry steamer, the "Ann Arbor No. 1," has just been launched at Toledo, O., for the Toledo, Ann Arbor & North Michigan Railroad Company, which will use it to carry loaded grain cars across Lake Michigan. The boat was constructed especially for this traffic and is 261 feet long, 52 feet wide and 18 feet deep. Twenty-four cars will be taken across the lake on each trip.

A line of steamboats was placed on the Missouri River two months ago to carry freight between Sioux City, Ia., and points in South Dakota, and rates were cut down to one-half the rail rate for miles on both sides of the river. This competition was unpalatable to the railroads and they engaged two large steamers to go into the Sioux City business at a loss and drive the other boats out of business. Meantime grain shippers are happy.

## RANGE OF PRICES AT CHICAGO.

The daily range of prices of grain for September delivery at Chicago since September 15 and for October delivery since October 1 has been as follows:

SEPTEMBER.	WHEAT.			CORN.			OATS.			RYE.		BARLEY.		FLAX SEED.	
	Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Low.	High.	Low.	High.
15	72½	72½	72½	47	47½	47½	33½	33½	33½	56	56	70	70	105	105
16	72½	72½	72½	47½	47½	47½	33½	33½	33½	56	56	70	70	104½	104½
17	72½	72½	72½	46½	46½	46½	33½	33½	33½	56	56	68	68	104½	105
18															
19	71½	72½	71½	46	46½	46	32½	33½	32½	55½	55½	66	66	103	105
20	72½	72½	72½	45½	46½	45½	32½	32½	32½	55½	55½	68	68	105	105
21	72½	72½	72½	44½	46	45½	32½	33	33	56	56	67	68	105½	105½
22	73	74	74	45½	45½	45½	32½	33	33	57	57			106½	106½
23	73½	73½	73½	45	45½	45½	32½	33	32½	57½	57½	60	70	107½	107½
24	73½	73½	73½	45½	46	45½	32½	32½	32½	57½	57½	55	63½	107½	107½
25															
26	73½	74½	74½	45½	46½	45½	32½	32½	32½	57½	57½	64		108	108
27	73½	73½	74½	45½	46½	46½	32½	32½	32½	57	57	64	66		
28	73½	74½	73½	45½	46½	45½	32½	32½	32½	57	57	68		106½	106½
29	73½	73½	73	44½	45½	44½	31½	31½	31½	57	57			106½	106½
30	72½	73½	72½	43½	44½	43½	31½	31½	31½	55½	55½			106½	106½
1	72½	73½	72½	43½	44½	43½	30½	31½	31½	54½	55½			106	106
2															
3	72½	73½	72½	43½	44½	43½	30½	31½	31	53½	54½	64			
4	73½	73½	73½	44	44½	44½	31½	31½	31½	55	55	64	66	107	107
5	73½	73½	73½	43½	44½	43½	31½	31½	31½	54½	54½	67		108	108
6	73½	74	74	43½	43½	43½	31½		31½	54	54½	64		109	109
7	73½	74½	74	43½	44½	43½	31½	31½	31½	53½	53½	58	60	109	109
8	74	74½	74½	43½	44	44	31½	31½	31½	55	55	58	60	109	109
9															
10	74½	74½	74½	43	43½	43½	31	31½	31½	56½	56½	63	67	111	111½
11	72½	73½	72½	41½	42½	42½	29½	30½	29½	56½	56½	67		112½	112½
12	72½	73½	73½	41½	42½	42½	29½	30	29½	56	56½	60	65	112½	112½
13	71½	73½	73½	41½	42½	42	29½	29½	29½	57½	57½	58	65	112	113
14	73½	73½	73½	41½	42	41½	29½	29½	29½	56	56	63	65	111½	112½
15															

The trade in timothy seed was active and clover in better demand during the week ending September 17. September timothy ranged from \$1.64 to \$1.85, declining Saturday to \$1.70. October clover ranged from \$5.75 to \$5.90. Flax was quiet.

Timothy continued active the week ending September 24, September selling from \$1.66 to \$1.85. Clover advanced during the week from \$5.85 to \$6.30 for October delivery. Flax was dull, the receipts being mainly from the Southwest and not half those a year ago.

In the week ending October 1 timothy declined and clover went up in price. Exporters of flax did nothing, but local crushers caused a good demand. September timothy declined from \$1.80 to \$1.61. Prime contract clover seed sold from \$6.30 to \$6.15. In timothy there was no speculative life; it was dull and drooping, with daily reduction in price.

In the week ending October 15 timothy seed was in good demand and steady. The cash trade in flax was really a trade in futures, as current arrivals were placed on sales to arrive. Shipments were smaller. Clover was quiet, with October at \$6.00 to \$6.35.



## INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector P. Bird Price the grain received at Chicago during the month of September was graded as follows:

## WINTER WHEAT.

Railroad.	White.			Turkish.			Red.				No Grade.
	2	3	4	1	2	3	1	2	3	4	
C., B. & Q.....	4	2	31	1214	334	1	118	344	282		23
C., R. I. & P.....	9	1	...	482	666	...	66	177	128		11
C. & A.....	2	2	3	1	395	296	...	43	625	82	13
Illinois Central.	1	2	...	133	35	...	220	391	141		17
Galena Div. N. W.	...	...	...	2	65	16	...	1	10	7	2
Wis. Div. N. W.	1	2	...	...	...	...	...	2	3	1	...
W. St. L. & P....	5	11	...	27	24	...	13	319	138		10
C. & E. I.....	11	7	...	7	...	...	54	257	55		46
C., M. & St. P....	2	1	3	963	239	...	23	49	19		6
Wisconsin Cent.	...	...	...	...	...	...	...	...	...	...	...
C., St. P. & K. C.	...	...	...	513	630	...	2	36	12		2
A., T. & S. Fe...	1	13	4	...	1325	175	...	242	194	143	7
Through & Spec.	1	3	...	13	38	...	188	376	51		15
Total each grade	4	50	34	37	5137	2,453	1	972	2781	1059	152
Total W. wheat.											12680

## SPRING WHEAT.

Railroad.	2			3	4	No Grade.	White.		Mixed Wheat.
	2	3	4				2	3	
C., B. & Q.....	140	682	170	24	40	176	7	24	
C., R. I. & P.....	...	56	51	...	2	83	...	...	
C. & A.....	1	14	7	4	...	11	...	...	
Illinois Central.	4	20	5	...	...	4	...	...	
Galena Div. N. W.	18	294	47	4	...	3	1	5	
Wis. Div. N. W.	...	5	3	...	...	...	...	...	
W. St. L. & P....	...	4	2	...	...	...	...	6	
C. & E. I.....	...	...	...	...	...	...	...	...	
C., M. & St. P....	18	102	34	7	...	1	...	1	
Wisconsin Cent.	...	...	...	...	...	...	...	...	
C., St. P. & K. C.	1	115	14	...	1	14	...	1	
A., T. & S. Fe...	...	6	1	...	...	...	...	1	
Through & Special	100	5	8	3	...	60	...	...	
Total each grade	282	1,303	342	42	43	352	8	40	
Total Spg. wheat.									2,412

## CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3				
C., B. & Q....	952	283	102	23	2,089	682	303	7
C., R. I. & P....	262	92	31	19	1,084	583	133	3
C. & A.....	290	89	134	53	289	101	43	3
Illinois Cent.	1,088	86	422	111	480	129	243	3
Gal. Div. N. W.	296	117	19	9	734	443	288	5
Wis. Div. N. W.	6	1	...	...	...	2	...	...
W. St. L. & P....	360	80	180	43	152	55	31	3
C. & E. I.....	195	79	75	17	110	54	40	...
C., M. & St. P....	76	63	4	12	229	489	185	4
Wis. Central.	...	...	...	...	...	...	...	...
C., St. P. & K. C.	47	37	...	...	91	146	35	1
A., T. & S. Fe...	112	69	33	15	138	64	44	...
Thrh'g & Spel	6	15	4	2	9	21	29	2
Total each grd	3,689	1,011	1064	304	5,405	2,767	1,356	31
Total corn.....								15,567

## OATS.

Railroad.	White.		2	3	White Clipped.		No Grade.
	2	3			1	2	
C., B. & Q.....	101	827	281	232	...	...	16
C., R. I. & P.....	14	584	69	128	...	...	8
C. & A.....	18	89	110	17	...	12	2
Illinois Central.	52	589	540	332	...	...	16
Galena Div. N. W.	99	979	86	281	...	...	4
Wis. Div. N. W.	13	107	2	40	...	1	1
W. St. L. & P....	18	115	75	117	...	...	5
C. & E. I.....	18	169	289	92	...	...	7
C., M. & St. P....	77	639	109	235	...	12	7
Wisconsin Central	4	1	1	...	...	...	...
C., St. P. & K. C.	17	158	34	81	...	...	...
A., T. & S. Fe...	10	124	99	19	...	...	1
Through & Special	19	135	40	50	...	1	7
Total each grade.	460	4,516	1735	1624	...	26	74
Total oats.....							8,435

## RYE.

Railroad.	1	2	3	No Grade.
C., B. & Q.....	199	56	3	
C., R. I. & P.....	119	37	4	
C. & A.....	14	5	...	
Illinois Central.	5	30	...	
Galena Div. N. W.	67	16	1	
Wisconsin Div. N. W.	9	6	...	
W. St. L. & P....	1	9	...	
C. & E. I.....	27	8	10	
C., M. & St. P....	19	36	5	
Wisconsin Central	...	1	...	
C., St. P. & K. C.	20	9	...	
A., T. & S. Fe...	16	11	1	
Through & Special	61	27	...	
Total each grade.	557	251	24	
Total rye.....				832

## BARLEY.

Railroad.	Bay Brewing.	3	2	3	4	5	No Grade.	Total No. Cars by Each Road.
C., B. & Q.....	...	49	132	48	2	...	...	10,002
C., R. I. & P.....	2	...	49	73	15	...	2	5,043
C. & A.....	...	...	1	...	...	...	...	2,771
Illinois Central.	...	1	182	120	2	...	...	5,404
Galena Div. N. W.	...	12	397	58	5	...	2	4,373
Wis. Div. N. W.	...	2	111	129	5	...	2	454
C. & E. I.....	...	...	...	...	...	...	...	1,803
C., M. & St. P....	...	19	466	136	5	...	3	4,298
Wisconsin Central.	...	...	4	16	1	...	...	28
C., St. P. & K. C.	...	5	29	31	1	...	...	2,083
A., T. & S. Fe...	...	1	2	7	...	...	...	2,878
Through & Special	...	18	14	6	...	...	...	1,327
Total each grade.	2	107	1,387	624	36	9	42,091	
Total barley.....								2,165

## WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at primary markets during the 15 weeks ending October 8 for the last three years were as follows:

	1892.	1891.	1890.
St. Louis.....	15,927,000	14,083,000	5,948,000
Toledo.....	16,463,000	13,988,000	3,647,000
Detroit.....	3,729,000	3,990,000	2,211,000
Kansas City.....	12,267,000	5,432,000	2,508,000
Cincinnati.....	1,069,000	1,513,000	467,000
Winter wheat.....	49,455,000	39,006,000	14,781,000
Chicago.....	25,830,000	24,083,000	4,951,000
Milwaukee.....	5,334,000	2,894,000	1,760,000
Minneapolis.....	17,043,000	14,435,000	9,368,000
Duluth.....	11,439,000	12,089,000	4,158,000
Spring wheat.....	59,646,000	53,501,000	20,236,000
Winter wheat.....	49,455,000	39,006,000	14,781,000
Total, 15 weeks.	109,101,000	92,507,000	37,017,000

## RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during September, 1892 and 1891, of seeds, hay and broom corn:

	Repts.	Timothy lbs.	Clover lbs.	Other grass seeds lbs.	Flax-seed bu.	Broom corn lbs.	Hay, tons.
1892...	9,184,489	394,151	480,534	837,881	839,650	17,484	
1891...	11,624,805	599,718	408,686	2,167,031	644,510	17,715	
Ship'ts							
1892...	7,364,357	158,798	1,747,954	891,087	959,917	1,452	
1891...	4,724,477	501,344	1,735,615	1,607,467	1,167,272	2,988	

## VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, October 8, 1892, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany.....	...	11,000	24,000	17,000	3,000
Baltimore.....	1,865,000	58,000	210,000	17,000	...
Boston.....	295,000	168,000	57,000	1,000	13,000
Buffalo.....	2,060,000	438,000	592,000	33,000	187,000
do afloat.....	...	...	...	...	...
Chicago.....	8,301,000	4,900,000	2,503,000	333,000	168,000
do afloat.....	...	...	...	...	...
Cincinnati.....	2,000	8,000	...	6,000	17,000
Detroit.....	1,000,000	31,000	78,000	26,000	37,000
do afloat.....	...	...	...	...	...
Duluth.....	3,653,000	...	...	...	...
do afloat.....	...	...	...	...	...
Indianapolis.....	520,000	45,000	80,000	9,000	...
Kansas City.....	1,497,000	131,000	172,000	49,000	...
Milwaukee.....	1,277,000	9,000	49,000	64,000	186,000
do afloat.....	...	...	...	...	...
Minneapolis.....	3,103,000	4,000	8,000	3,000	101,000
Montreal.....	505,000	...	226,000	2,000	54,000
New York.....	11,566,000	1,351,000	1,595,000	10,000	18,000
do afloat.....	302,000	174,000	31,000	3,000	...
Oswego.....	...	...	...	...	...
Peoria.....	95,000	188,000	124,000	7,000	...
Philadelphia.....	1,707,000	271,000	86,000	...	...
St. Louis.....	5,722,000	78,000	484,000	20,000	10,000
do afloat.....	...	...	...	...	...
Toledo.....	3,430,000	256,000	104,000	184,000	...
Toronto.....	109,000	...	3,000	...	38,000
On Canals.....	1,512,000	664,000	97,000	7,000	30,000
On Lakes.....	2,716,000	2,451,000	689,000	96,000	434,000
On Miss. River.	19,000	60,000	2,000	...	...
Grand total.....	51,256,000	11,316,000	7,214,000	887,000	1,296,000
Same date last year	29,423,073	5,458,710	5,024,100	2,511,529	2,015,146



Issued on August 16, 1892.

**AUTOMATIC WEIGHING MACHINE.**—John B. Stoner, New York, N. Y., assignor to Francis J. Hasbrouck, same place. (No model.) No. 480,752. Serial No. 403,758. Filed Aug. 26, 1891.

**BALING PRESS.**—Jesse B. Johnson and Joseph R. Johnson, Indianapolis, Ind. (No model.) No. 480,771. Serial No. 412,100. Filed Nov. 16, 1891.

**FANNING MILL.**—Osbert D. Dickey, Mountain Grove, Mo. (No model.) No. 480,809. Serial No. 419,770. Filed Jan. 30, 1892.

**HAY PRESS.**—Henry Copeland, Chattanooga, Tenn. (No model.) No. 480,917. Serial No. 422,816. Filed Feb. 25, 1892.

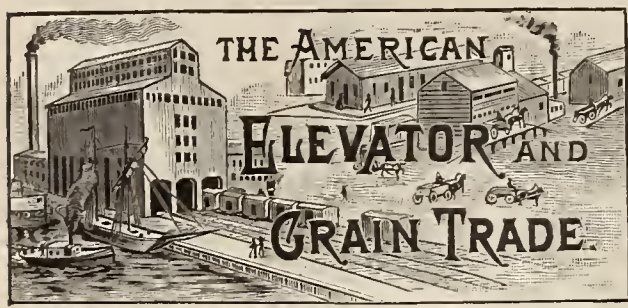
**CONVEYOR.**—John H. Shull and George S. Dorney, Findlay, O. (No model.) No. 480,939. Serial No. 401,078. Filed July 29, 1891.

**GRAIN SCOURING MACHINE.**—Rosia W. Welch, Baltimore, Md., assignor to two-thirds to William A. Dunn and Louis D. Passano, same place. (No model.) No. 480,942. Serial No. 411,833. Filed Nov. 13, 1891.

**GRAIN CUT-OFF.**—Philaender D. Thompson, Neligh, Neb. (No model.) No. 481,080. Serial No. 424,730. Filed March 12, 1892.

**GRAIN WEIGHING MACHINE**





## MITCHELL BROS. COMPANY.

(INCORPORATED.)

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A. J. MITCHELL, - - - Business Manager.

HARLEY B. MITCHELL, - - - Editor.

### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., OCTOBER 15, 1892.

### HIDING WHEAT STOCKS.

Several elevator companies doing business in the Northwest have refused to continue to make public weekly the amount of grain stored in their country houses, much of which is owned by farmers and not on the market. Their refusal has precipitated another attack upon the much abused elevator man. We publish elsewhere in this issue a few opinions on the matter. The attack is led by *Bradstreet's* of New York, denouncing the companies for refusing the information which they have given that publication for several years. Such ingratitude in such an estimable publication is deplorable. This information is the private property of the elevator company in whose houses the grain is stored and each company has a perfect right to do just as it desires with the information. The companies have been collecting, compiling and giving out this information free of cost to anyone but themselves. If *Bradstreet's* was denounced for refusing to collect, compile and give out information free, the editor of that sheet would have a fit. The cases are similar.

Questions framed to prejudice the receiver have been sent to farmer-working demagogues and theorists, who have little idea of the practical and naturally the replies have the same coloring as the questions. Several have taken advantage of the opportunity to gain the good will of the farmers and have charged elevator men with causing all ills that have befallen that class and with scheming now to lay new nets to entrap him.

Such rot can not be otherwise than disgusting to an unprejudiced thinker. The elevator men of the Northwest, as well as of other districts, are just as honest as men engaged in any other line of business. The capital, brains and energy invested in the grain business is not there in the interests of the producer nor the consumer, as many nearsighted individuals claim to think it should be. Like those engaged in other lines of trade the elevator men follow the busi-

ness for what they can honestly get out of it. They are neither robbers, cheats nor thieves, but they are working to advance their own interests, and they are not using dishonorable methods, either. It is their right, it is their duty, to conduct their business in any reputable way that seems to them most probable of bringing success.

### NEW GRADES AT BUFFALO.

So much hard Kansas wheat has been shipped through Buffalo that the Merchant's Exchange was urgently requested to establish grades for it. In compliance with this request of the interested dealers a change was made in the inspection rules, as follows:

KANSAS RED WINTER WHEAT—The grades of Nos. 1, 2, and 3 hard winter wheat shall correspond with the grades of Nos. 1, 2, and 3 red winter wheat, except that they shall be of the Turkish red variety.

The proposition was also made to establish a grade of clipped oats and to drop the grades of No. 1 and No. 2 amber, but the committee declined to do so. A change was made in the corn grades as follows:

No. 4 YELLOW CORN shall be three-fourths yellow, not wet or in heating condition; that is, unfit to grade No. 3 yellow.

### LEAKING CARS.

To one who often crosses the tracks of railroads entering Chicago the fact is known that a large amount of grain leaks out of the cars through the floors. It is seldom that the tracks are free from grain so located as to show conclusively that it leaked from a car as it passed along.

In a measure shippers are responsible for this. They should refuse to accept old, worn-out cars and see that new and strong ones are well coopered. Some shippers are so careless and thoughtless that they accept any sent to them. Cars so old and weak as to almost fall to pieces from their own weight, frequently arrive, at terminals swaying and creaking under a heavy load of grain. The acceptance of such cars is rank foolishness, even in time of our worst car famines. If you feel that you must throw your grain away, throw it to the needy at your station; it will never do anyone any good scattered along the tracks of our railroads. The car borers cause some of this trouble, but here the carriers are again to blame for giving them an opportunity to bore holes in the car floors. The yards where these loaded cars are allowed to stand are not guarded near as well as they should be nor as well as they would be if shippers would do more kicking.

### THE CRY OF THE DEMAGOGUE IN THE NORTHWEST.

The low, mean tricks groveling politicians will stoop to for the purpose of gaining a vote is again shown by their attack upon the elevator men and millers of the Northwest. It is to be regretted that such unprincipled demagogues are allowed their freedom.

As is well known to our readers the grain dealers of the Northwest have repeatedly been charged by farmer agitators with having a ring or combination for depressing prices and robbing the farmer. Their only object has been to gain the farmers' political support, and their only arguments have consisted of abuse of the grain buyers.

This time the baseless charges come from an ex-convict who, failing in numerous attempts to blackmail the millers and elevator men of the Northwest, has published a pamphlet teeming with lies, misrepresentations, partial quotations and hearsay statements. After hawking this infamous matter from place to place without finding a buyer, this self-confessed criminal gave it to a couple of newspapers which have proved themselves unworthy of any support from the great party whose principles they claim to advance.

There is no ring in the Northwest nor has there been any formed to rob the farmer. Competition

is severer in that district than any other grain growing district of this country. A ring is entirely out of the question and ever will be. When hard spring wheat becomes a drug on the market competition among the many millers and dealers may not be so strong, but even that condition is improbable.

If the misguided farmer thinks he is being robbed by dealers in the Northwest, he has the privilege of shipping his grain to Peoria, Indianapolis, Toledo or any other market where the dealers of the Northwest are not interested. A few shipments would convince him that his local buyer was offering all the markets of the world would justify him giving. The only robbers in the case are the blatant demagogues, who by their dishonorable charges, rob the farmer of his reason and prejudice him against the buyer.

### FREIGHT RATES AND WATERWAYS.

Shipments eastbound have been increasing for some time and the end of the season of navigation is near at hand, so the Central Traffic Association has advanced the rate on grain to 25 cents per hundred Chicago to New York. Could a more forcible argument be advanced in behalf of the deepening of the channels connecting our great lakes to the uniform depth of 22 feet? At present many of the large boats are prevented from taking full loads by the shallow channels.

Congress will appropriate plenty of money for the improvement of swamps, bayous and creeks, but when it comes to the great lakes, which accommodate more traffic in a week than all our rivers do in a year, it is very close and penurious. The way our numskull, shallow-brain, never-think Congressmen succeed in rolling golden logs from the United States treasury into their district swamps is startling.

### DELAY OF GRAIN BY CARRIERS.

A car shortage has existed on most all of our Western roads for some time. Shipments have been unreasonably delayed at initial station and along the road without a cent demurrage being paid to owner. Grain shippers continue to tolerate this imposition just as though it were impossible to do aught but kick a little once in awhile. Something more effective must be found. New methods must be tried. Make strong kick once by signing the petition published in this issue. On account of weevil and heated grain shippers have lately suffered greater losses on account of delayed shipments than for years before. Only recently a car of wheat shipped to Chicago from Stratton, Neb., was on the road thirty days. The temperature was high and the wheat new; so it heated, and arrived at destination worthless. An Indiana milling company was forced into bankruptcy last month by having fourteen cars of wheat ruined by delay in transit.

The complaints of scarcity of cars come from all grain growing districts. Shippers have been so delayed in forwarding their grain from the Southwest that they have asked for an extension of time on their contracts. In Iowa shippers get only about one-fifth the cars asked for. In South Dakota houses are full and cars are so scarce that many elevator men have closed up and suspended business. The chairman of the railway commission said this week that of nearly 1,100 applicants for cars less than 300 were supplied. In Minnesota the supply is way below the demand, and in Washington grain shippers have become desperate, as many of them have been compelled to pile sacked grain outside their houses.

There is a remedy for all this trouble, but grain shippers seem to be afraid to administer it.

According to a recent decision of the Supreme Court of Arkansas shippers are entitled to storage charges from carrier when cars are not supplied when applied for, and carriers are liable for damages accruing to goods while in their possession. The court held that "where a common carrier wrongfully refuses to accept a commodity for



transportation the shipper cannot abandon it to the ravages of weather at the carrier's expense, the shipper being bound to properly protect it, and the carrier being liable for the reasonable expenses therefor, together with proximate damages for delay. A recital in a bill of lading that the goods were received by the carrier in apparent good order refers only to the external condition of the goods, and as between the original parties is only prima facie proof of the true condition of the goods when received. A common carrier is liable for damages accruing to goods received for shipment from the time they are received, and not from the date of the bill of lading only."

Similar decisions have been rendered by other courts on these points, so the justice of shippers demanding damages for loss caused by unreasonable delay on the part of carriers is well established at law. When other means fail shippers should seek justice through this medium.

### COMMERCIAL EXCHANGES NOT TO BLAME.

It is becoming the practice with unthinking persons to charge our commercial exchanges with causing all the economic ills they can not account for in a reasonable way. These persons seem to forget, or else do not know, that our commercial exchanges were organized for the express purpose of advancing the interests of the city in which they are located, by promoting the trade or trades which they represent. It is these organizations that secure trade reforms and provide a meeting place for buyers and sellers. Trade is greatly simplified and the cost of conducting the same is greatly reduced by the standard classifications of commodities and rules governing the trade in same.

Yet, these organizations are charged with robbing the "poor down-trodden" farmer and with stealing bread from the consumer at the same time. This erroneous idea of our commercial exchanges is derived from the libelous statements of agitators and political sheets, that aim to secure votes by pointing out an alleged enemy of voters and then antagonizing it. It will ever be so until readers cease to let out their thinking to unprincipled demagogues who find nothing too mean or too low to do for a vote. When the reign of prejudice and second-hand ideas is at an end and original thought rules supreme our commercial exchanges will receive credit for the great work they do for the country, but not before.

### WILL TRANSFER AT TERMINALS.

A company has been organized to erect grain transfer elevators for transferring grain from one car to another at railway junctions and terminals, and will immediately build houses at several points. We have repeatedly pointed out in these columns the needs of the trade in this line.

First-class transfer houses will prove of great advantage to all connected with the grain shipping trade. Carriers will be able to return their empty cars to the west much quicker, as transfers will be made in one-fifth the time now required to get the grain transferred by shovellers or unloaded into a storage elevator. Grain will not be mixed, wet or only partially transferred, as is now frequently done where transfer cars are employed.

Shipments will not be docked for future shrinkage as in cases where they are sent to storage elevators, and the identity of a shipper's grain will be preserved to destination. Carriers will be paid freight on the exact amount they transport, not on the amount reported by the terminal storage elevator or transfer car. The chances for blockades and exasperating delays in transit will be greatly reduced by every additional transfer house erected. Each carrier can profitably support one or more transfer houses of large capacity at their Western terminus, and at each junction where much grain is received from a connecting line. The antique methods of transferring grain should be relegated to oblivion and

modern improved methods adopted at every point.

### WILL FIGHT FOR THE ERIE'S IMPROVEMENT.

The selfish rail carriers continue their fight upon the Erie Canal and are using every means to keep grain from being sent East from Buffalo via that waterway. They have even gone to the unreasonable and unprofitable extreme of paying storage on the grain at Buffalo until they could take it, in order to keep the canal from getting it. Their greed caused a blockade last year, and late reports give promise of another one soon, as the carrying trade is now in a congested condition at that point.

The people of the state are awakening to the fact that the rail carriers are vigorously striving to destroy the great freight rate reducer and will hold a convention at Buffalo next week to celebrate the centennial of the commencement of the work of constructing the state canals and to inaugurate an organized movement for securing their speedy improvement. Even the hypocritical governor, who recommended a liberal appropriation for the improvement of the canals and then vetoed the appropriation made, is again favoring improvement.

Although grain shippers of the Western lake ports take no part in the agitation for improvement of the Erie Canal, they are directly interested to the extent of about five cents on every bushel of grain sent East during the season of navigation. The canal must be improved and maintained, and the strength of the pool broken, or the grain trade of Buffalo and New York harbor will decline.

### EXPORTS OF BREADSTUFFS.

The last report of the Bureau of Statistics shows that breadstuffs valued at \$17,305,085 were exported in September, against \$31,462,021 in the preceding September; and \$50,609,195 in the three months ending with September, against \$76,694,822 in the three months ending with September, 1891, and \$183,545,002 in the nine months ending with September, against \$145,025,129 in the corresponding period of 1891.

In September we exported 10,691,800 bushels of wheat and 1,830,353 bushels of corn, against 19,496,174 bushels of wheat and 2,838,916 bushels of corn in September last year.

For the three months ending with September the exports were 31,760,796 bushels of wheat, 6,395,541 of corn, 431,877 of oats, 482,448 of rye, 849,500 of barley and 4,102,489 barrels of wheat flour, compared with 50,414,898 bushels of wheat, 7,097,342 of corn, 528,915 of oats, 4,269,936 of rye, 490,650 of barley and 2,828,743 barrels of wheat flour for the corresponding three months of 1891.

### WILL WORK FOR GOOD ROADS.

A convention will be held at Chicago on Wednesday, October 19, under the auspices of the National Board of Trade, to consider the improvement of public roads in the United States.

The call for the convention has been numerously signed by officials connected with the boards of trade and agriculture and by almost everybody who has been prominently identified with the movement for better roads. Representatives have been invited from the various state and local road improvement associations, chambers of commerce, farmers' societies, cities and towns, bicycling clubs and all other bodies interested, together with active private and individual friends of the movement.

The convention will be the medium through which those in favor of good roads can crystallize their views into some plan of action. Measures will be taken for the formation of a "National League for Good Roads." Good roads would make business more profitable to the country grain shipper. Farmers' deliveries would continue right through the season, and the buyer would not need to idle away part of the time

and overwork himself at other times during a rush of grain to market when roads are good. This movement is full of promise to the country grain dealers and should receive the active support of everyone.

### WHY WHEAT RECEIPTS ARE LARGE.

A sell-your-wheat circular has not to our knowledge been issued, but the farmers act very much as though they had received copies of many different circulars so advising them. The receipts at nine primary markets during the fifteen weeks ending October 8, as is shown by table published in this issue, amounted to 109,101,000 bushels, which is nearly twenty per cent. greater than last year, when we had a larger crop and a greater foreign demand. It is more than three times as great for the same weeks two years ago, and lacks only 14,000,000 of being one-half as much as was received at these markets during the 52 weeks ending with the last Saturday in last June. One reason is that most everyone who held wheat last year lost by it and they have not had time to forget their experience. The weather has been excellent for threshing and marketing, and the farmer has taken advantage of it. The complaints of weevil, especially in old wheat that has been stored, is greater than for years before, and reports from numerous places agree in stating that farmers have discovered that their wheat is infested with weevils, and they are rushing it to market. Buyers should be vigilant.

Each of the reasons given are potent, and combined they are sufficient to bring about the remarkable movement of wheat to market.

At the meeting of the Illinois Railroad and Warehouse Commissioners September 14 it was suggested that the "new" grades of all kinds of grain be abolished, but action was deferred because notice had not been given that this matter would be taken up. The Chicago Board of Trade, however, opposed the proposition, and the warehouse commission will shape its action to meet the views of the board, which were expressed in a notice posted recently, asking the railroad and warehouse commission at its next meeting not to abolish any of the "new" grades of grain except "new" corn.

The old cry of "Liverpool makes the price of our wheat" is being superseded by one to the effect that America controls the price of the bread of the world. Both equally foolish. The most potent factor in fixing the prices of our breadstuffs is our home supply and demand. If the price of the entire crop is fixed by the price England is willing to pay for our surplus, why is it that our markets are frequently above an export basis? The champions of the Liverpool theory have got the facts turned around. Our market prices are made at home, and we export only when our market is low enough to insure the shippers a profit.

A TERRIBLE famine exists in Mexico, owing to the total failure of crops for the last four seasons. At Marelia a mob of 6,000 starving wretches made forcible entry into a warehouse containing 5,000 bushels of corn, stored by rich speculators, and carried off the whole lot. To alleviate the distress of the people "La Junta Beneficia" is distributing corn three times a week free of charge. These supplies are imported from the United States. The local demand in Northern Mexico has been satisfied and the shipments are now far into the interior. In the City of Mexico corn is selling at \$11 for 300 pounds. The regular import duty on corn is one cent per kilo., gross weight, but this has been suspended, and by the present plan of the Mexican Government only one-fourth of the duty will be collected between December 1 and January 31. Grain dealers in Mexico believe that the government will extend the time of free importation for an additional six months, which would greatly increase imports from the United States.



## Grain Dealers' Associations.

### ILLINOIS GRAIN MERCHANTS' INSURANCE AND PROTECTIVE SOCIETY.

*President*, F. M. PRATT, Decatur; *Secretary*, T. P. BAXTER, Taylorville; *Vice-President*, EDWIN BEGGS, Ashland; *Treasurer*, E. F. NORTON, Tallula.

### GRAIN DEALERS' ASSOCIATION, OF OHIO.

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## EDITORIAL MENTION

CUT out "A Protest, a Petition," sign and mail to us. Do not forget this.

Do you experience any difficulty in getting cars to ship grain? You help us to get signers to the protest and petition published in this issue, and we will help you to get cars. We think that is a fair offer; don't you?

DULUTH is to be a sample market for wheat. The Board of Trade has so decided, and is preparing to carry its decision into effect. It is expected that this will attract many more millers to that market, and result in the maintenance of better prices.

IMPOSING ceremonies will attend the dedication of the World's Columbian Exposition in Chicago on Friday, October 21, just 400 years after Columbus saw the New World. The civic parade on Thursday will be followed by a military parade on Friday.

AT BUFFALO railroad companies have paid storage charges on several lots of grain almost equal to the total freight, rather than let the Erie Canal get the business. To crush the canal the roads will risk breaking themselves. "Make or break" is their motto.

THE weevil is destroying the new wheat crop in Kentucky, Southeastern Indiana and Ohio, and farmers are making haste to market the infested grain before the insect can do its worst. Weevils are frequently found in grain loaded in cars, and in that case it is advisable to kill them

before unloading and mixing with other grain. Bisulphide of carbon thrown on the grain as it lies in the closed car has been found a good exterminator.

If you want to add ten years to your life, get the Easy Pusher and save your energies. It will push cars on any track and in any condition. If you will look at the advertisement of the E. H. Stafford Company, in this issue you will quickly discover its advantages.

THE Dominion Government Board, appointed to fix the grain standards for this year, met at Toronto recently and made the standard grades the same as last year, with the exception of barley, which was made a shade lower on account of the inferior quality of this year's crop.

THE New York Sun has issued a crop report which gives the total yield of corn as 130,000,000 bushels and of oats 500,000,000 bushels. This infallible (?) sheet will no doubt soon come out with a wild-eyed screed on the total depravity and general uselessness of government crop reports.

If you have occasion to address those engaged in the grain trade, dealers in flour and feed, hay and straw, fruits and produce, butter, eggs and poultry, or in the milling, malting, brewing or distilling trade, just the directory you want is advertised in "Miscellaneous Notices," this issue. It is the most complete work of its kind and not expensive.

FOR more than two months Huntley, Cranson & Hammond have been running the full force of their Monitor Works, at Silver Creek, N. Y., twelve hours a day, and have orders enough on their books now to keep them busy until December. The propositions they make from time to time, in their advertisements are such that elevator men can hardly overlook.

BY BUYING all the broomcorn in sight last fall the dealers and manufacturers succeeded in putting the price up from 3½ cents to 7½ cents a pound, but in trying to unload their large stocks the price declined to 5 and 6 cents, and now comes the news from the broomcorn districts that the crop was never better. A collapse of the corner is confidently awaited by manufacturers outside the combination.

ANOTHER law passed by North Dakota's granger legislators has proven useless. It provided that the Railway Commission could order carriers to construct platforms at any point needed. These platforms save the farmers back oil and make it more convenient for him to ship his own grain. The commission has tried to secure platforms at a number of points, but has been successful only in cases where carriers were willing.

ANOTHER crop report has been issued and the croaker, for political purposes, has stalked forth from his lair in the Northwest with over two columns of abusive rot and contradictory statements. The editor, in his rage, becomes unreasonable, and attacks everything connected with the reports. It should not be forgotten that the reports would not have any influence on the markets if the members of the grain trade did not consider them reliable.

AN ESSENTIAL factor in the grain trade of any port is first-class transfer and storage elevators, and with the completion of the two new elevators at Westwego and Southport, New Orleans will take another stride towards its proper place as an export market for Western grain. It has been demonstrated that the shipment of grain for export via New Orleans is profitable to owners, to the commission men of the city, to the railroads carrying the grain and the shippers. The railroad trackage has been increased to four and one-half miles to accommodate grain cars, and men are at work night and day increasing the elevator room. The sanguine expectations of the pro-

jectors of the enterprise rest on a sound basis, and they rightly believe that the grain trade of New Orleans will continue to grow like the green bay tree.

ONCE again the courts have decided that a car service association has not the right to refuse to deliver loaded cars to consignees because consignees refuse to pay back demurrage charges. It has been repeatedly decided that a carrier must fulfill its contract to deliver.

BOYS have recently been caught stealing grain from cars in the Missouri Pacific yards at Atchison. The carrier is not required to give a clean bill of lading and deliver the amount received, so the shipper stands the loss. If the carrier had to make good any loss of grain in transit, better cars would be provided for grain, and they would not be left open and unguarded in out-of-the-way places at night. Shippers must expect this imposition to be continued as long as they peacefully submit to it.

ANOTHER inspection district has been created by the Nebraska State Board of Transportation, upon application by the Nebraska City Cereal Mills Company, which operates a 125,000 bushel elevator at the junction of the Burlington & Missouri and Missouri Pacific railroads in Otoe county. Governor Boyd has accordingly appointed David S. Jackson of Nebraska City, inspector for Otoe county. Grain inspection has been established in two other counties under the new state warehouse law.

CARRIERS have commenced war upon the owners of private cars, and the Chicago & Grand Trunk has reduced the mileage for refrigerator cars from one to one-fourth of one cent per mile. Some of the large shippers provided more cars than they needed and leased them to small shippers, thus keeping the cars of the carriers in idleness. Private cars of shippers have long been looked upon as an evil by carriers, and they will take active steps to reduce it whenever an excuse is found for so doing.

RAILROAD officials have repeatedly denied the charge that much grain is lost by careless switching of cars, yet it is so, and shippers should be persistent in claiming shortages when they occur. A car was recently so badly damaged while being switched in the yards of a Kansas road that all the grain ran out. Five to twenty-five bushels did not leak out at a newly made crack or crevice, nor was it shifted over the boards at the door; it all fell out at the bottom. The shipper's scales are not always to blame for shortage.

THE Philadelphia Commercial Exchange recently established the following grades of hard winter wheat: No. 1 hard winter wheat shall consist of hard varieties and shall be sound, dry and clean, and weigh not less than 61 pounds to the measured Winchester bushel. No. 2 hard winter wheat shall consist of hard varieties and shall be sound, dry and reasonably clean, and weigh not less than 59 pounds to the measured Winchester bushel. No. 3 hard winter wheat shall be reasonably sound and reasonably clean, unfit to grade No. 2, and shall weigh not less than 56 pounds to the measured bushel.

A WAIL of discontent is heard from the grain dealers of Kansas City, Mo., and the shortcomings and irregularity of Kansas inspection is claimed to be at the bottom of it. Those who are dissatisfied claim that the Kansas state inspectors grade grain only for the benefit of the small country dealers, that this discrimination causes the country shipper to send his best wheat to Chicago or St. Louis, reserving his No. 3 and No. 4 wheat to send to Kansas City commission men, confident that the Kansas inspection will be sufficiently high. The Kansas City commission men are chronic kickers, and none of the different inspection systems tried there have proved satisfactory (to them). When first established the Kansas inspection was very popular, but now that the Kansas City Commercial Exchange (composed



largely of commission men) has set up an inspection, the Kansas inspection has fallen from favor and is characterized as "rotten." Is there a nigger in the woodpile?

GRAIN inspection fees have been reduced by the Minnesota State Railroad and Warehouse Commission from 20 to 15 cents per car load and from 40 to 30 cents per thousand bushels in the cargo. A surplus of \$43,000 was on hand when the department last year reduced the fee from 25 to 20 cents, and the surplus has been increased the past year. It is believed that the department will continue self supporting, although the service has been improved by the hiring of men to watch the unloading of cars.

A POLITICAL demagogue has announced that the United Kingdom is preparing to levy an import duty on grain from this country. As the United Kingdom only produced about 54,000,000 bushels of wheat this year and commercial depression is general with most of its industries, a tariff on our breadstuffs cannot be expected. That country must import 160,000,000 bushels at least, and the United States is the only country that has much to spare. Grain exporters can rest assured that our trade with Great Britain will not be interfered with for some time to come, if ever.

A BLANKET policy is in vogue at Winona, Minn., which contains very liberal provisions. Following the regular introductory form of an insurance policy this new departure concludes with: "On grain and seeds of all kinds, their own or held by them in trust or on commission, or in store or sold but not delivered, or for which they are liable, while contained in cars on tracks owned by the Winona and Southwestern and the Chicago, Burlington & Northern Railways at and in the vicinity (distance limited to two miles from city limits) of the city of Winona, Minn."

RARELY have farmers succeeded in doing a grain business, but the plan adopted by the Patrons of Industry of Simcoe county, Ontario, has operated to their satisfaction. They deliver to their agent at Bradford all their grain, which is inspected, graded and stored with other grain of its kind, the depositor taking a warehouse receipt upon which he can borrow money at the bank. When, in the judgment of the farmer, it is best to sell he can at any moment order the agent to do so. A charge of two cents a bushel is made to cover storage, handling and insurance. In nine months this agency has handled 200,000 bushels of grain.

A CONFERENCE will be held in New York on October 19, to consider, among other things, the question of establishing separate grades for Canadian wheat destined for export, and through bills of lading. The grain section of the Toronto Board of Trade has, by invitation of the Trunk Line Association, appointed a delegate to the conference. Separate grade for Canadian grain is not a new idea and the conference may have the way for its final consummation. If the proposed grades are adopted much of the grain now exported as American will be credited to Canada, to the advantage of that country's export trade.

THE firm stand taken by the elevator men of North Dakota in refusing to conduct their business in accordance with the law passed by the farmer legislature has resulted in a waiver by the railroad and warehouse commission of that portion of the act requiring weekly reports from the elevators. On this condition the elevator men, with a commendable spirit of moderation, consented to operate their country houses as private. The following companies have already filed the required bonds: The Cargill Elevator Company, the Northern Pacific Elevator Company, the North Dakota Elevator Company, the Minneapolis and Northern Elevator Company, and the Southwestern Elevator Company.

## SHUTTING OFF REPORTS OF GRAIN STOCKS.

The Van Dusen Elevator Company says: We, as well as other elevator companies, have refused to give our stocks, for the reason that we think the information has a tendency to depress prices.

Secretary George F. Stoue, of the Chicago Board of Trade, says. The refusal of the elevator companies to furnish totals of wheat stocks is contrary to an enlightened business policy. This board is opposed to all plans for monopolizing or restricting commercial information of general interest.

The secretary of the Toledo Produce Exchange, Mr. Denison B. Smith, says: An accurate statement of stocks of wheat in store is absolutely indispensable, and a refusal to furnish them excites suspicion of their magnitude and reacts upon prices in greater degree than fair and open statements of quantity. The refusal of Minnesota Elevator Companies indicates an attempt at monopoly of information hurtful to the farmers.

It is not certain that this selfish action will avail the projectors. If they persist in the refusal some kind of estimates will be made for the use of the trade on the one hand and producers on the other. If those estimates are not correct, and thus mislead, there will soon be a demand for compulsory returns, or at least that reporters at different points shall be allowed to gather the information themselves.—*Chicago Tribune*.

The Northern Pacific, North Dakota, and the Van Dusen Elevator Companies refuse from henceforth to publish any account of the quantity of wheat in their respective elevators, claiming that it "hurts prices." It is a curious sight to see America stepping backwards and Russia advancing, for the Muscovite is now publishing regular official returns of crop yield and stocks with the utmost freedom.—*Corn Trade News, Liverpool*.

The North Dakota Elevator Company gives the following reason for refusing to report stocks: We refuse, as well as all other elevator companies. Too much statistics by Bradstreet's and the government advertising unnecessarily to the old world our surplus stock. That is what's the matter with the wheat market, advertising that we have more wheat to sell than is needed and more than we actually have. It is, in our judgment, wrong and is detrimental to the best interests of the agricultural industry.

The Northern Pacific Elevator Company writes: We are so firmly convinced that the erratic monthly government report, and all other systems of statistics which have in view the furnishing to buyers of American breadstuffs the reserves they have to rely on to fill their future wants, enabling them to buy from hand-to-mouth and have the other fellow carry it for them until they need it, is working injury to the agricultural interests of this country, that we have decided, as far as we are concerned, to cease being a party to it.

Mr J. C. Brown, the statistician of the New York Produce Exchange, writes: The concealment or withholding of statistics of stocks of wheat cannot operate to prevent a depression of prices, which depends upon more potent causes felt in and controlling the markets of the world. Exchanges, as well as the country at large, are benefited by all the information that can be obtained. In my judgment it would be a detriment not only to the exchanges, but to the country and the trade at large, to suppress anything in the form of information that can be used for the furtherance of business.

In our opinion, farmers, in the long run, have everything to gain and nothing to lose by the publication of monthly or weekly crop reports. It is true, they give us as much information to consumers as to producers. And it is true that producers might sometimes gain the advantage of temporary higher prices than are justified by the law of supply and demand by a belief on the part of consumers that crops are shorter than they really are. It may even be possible for them to advance prices by hiding crops or keeping back information about yields. But how often could that game be worked? Between producers and consumers stands middlemen and speculators. Abolish official crop reports and place, as far as possible, both producers and consumers in the dark concerning crops throughout the country, and the buyers and speculators in farm products are placed in the best possible position to take advantage of both. They would collect private crop reports for their own use, and be in

command of the situation. Prices would be more subject than ever to their manipulations. With the publication of accurate official reports, prices will depend very closely on the natural law of supply and demand.—*Farm and Fireside*.

Perhaps 60 per cent. of the wheat now in the country elevators is stored there by farmers, with which the public has no more to do than what the wheat farmers have in their farm granaries. Last year the farmers objected to such reports being published, and they stored a smaller proportion of wheat than usual. Now the publicity is removed and they are again putting their wheat in the elevators. The elevator companies do not report their supplies to each other, for they are in competition with each other and are more careful to keep their private affairs from their competitors than to keep them from others.—*Minneapolis Market Record*.

The idea that publicity can harm anybody, that secrecy can work some mysterious jugglery by which prices may be affected permanently, is so absurd that we should have declined to believe it to be entertained by the very competent gentlemen in the elevator business in Minnesota and the Dakotas, if they had not assigned it as their reason for refusing to furnish reports of grain in store. And even now we must be considered reluctant to accept such a libel on their intelligence, and consider it more probable that they have other reasons, which they prefer not to state, than to believe that they are converts to the system of a century or two ago.—*St. Paul Pioneer Press*.

Much has been said about the importance of concealing totals of wheat held at the Northwest in order to prevent depreciation of the price of wheat; in other words, the claim is made by the elevator people that publishing the total quantity of wheat held in Northwestern country elevators tends to depress the price of wheat generally. This would be funny if the elevator people did not make the claim so seriously. The reason given by the Northwestern country elevator officials for refusing to continue the publication of weekly totals of stocks of wheat is an untenable one; is discredited among economists and statisticians, and appeals to neither reason nor the best interests of the general public.—*Bradstreet's*.

We do not believe the action of the elevator men is based on an objection to the publication of information concerning stocks of wheat, provided there be reason for confidence in their completeness and accuracy. If it is, then they take a position which is by no means commendable. We do not believe it desirable to any legitimate interest to conceal facts relating to production, movement or holdings of staple products, in instances especially where such information has a direct influence upon active markets. But we do believe that the usual statements of available wheat stocks are with too much frequency a delusion and a snare, and in this manner furnish a means for an extent of evil against which the benefits are not plainly overbalancing.—*Cincinnati Price Current*.

Corn shellers were invented by Finney in 1815.

Would you like to have delays of grain in transit stopped? Then place your name on "A Protest, A Petition."

Those who take great pleasure in paying unreasonable demurrage charges on cars need not sign "A Protest, A Petition," published elsewhere.

The acreage devoted to barley has been greatly increased throughout the Western states since the import duty on that grain was increased to twenty cents a bushel.

No corn was imported in August, against 4,413 bushels in August, 1891; and during the eight months ending with August 873 bushels was imported; compared with 14,799 bushels during the corresponding period of 1891.

Oats amounting to 720 bushels was imported in August, against 69 bushels in August, 1891; and during the eight months ending with August 13,185 bushels was imported; compared with 7,800 bushels during the corresponding period of 1891.

Rye amounting to 39 bushels was imported in August, against 5 bushels in the preceding August; and during the eight months ending with August 49 bushels were imported; compared with 71,642 bushels during the corresponding period of 1891.

Hops weighing 140,879 pounds was exported in August, against 126,750 pounds in August, 1891; and during the eight months ending with August 3,032,030 pounds was exported, compared with 1,764,533 pounds during the corresponding period of 1891.



# ELEVATOR

## GRAIN NEWS

Stanton, Minn., is to have an elevator.

An elevator is being built at Holland, Man.

A grain elevator is talked of at Canton, S. D.

W. Jardine is buying grain at Carberry, Man.

F. L. Burns is buying grain at Carberry, Man.

Another elevator is being built at Harlem, N. D.

A flax fiber factory will be built at Huron, S. D.

Thomas Page will build an elevator at Topeka, Kan.

A 30,000-bushel elevator is going up at Sintaluta, Man.

F. E. Burke is building an elevator at Burr Oak, Kan.

E. B. Meeks is building a large corn crib at Cooper, Ill.

Grain of all kinds is being marketed freely at Golden, Ill.

J. O. Milligan, grain dealer at Wayne, Neb., has sold out.

C. C. Kauffman of St. Elmo, Ala., will put in a rice mill.

Dines & Cleveland have built an elevator at Alameda, Man.

John Moyer is about to build an elevator at Hamiota, Man.

The farmers have opened their elevator at Fulton, S. D.

Meyers & Co. are building an elevator at Heron Lake, Minn.

Wells Bros. of Herman, Minn., want to sell their elevator.

Alvord, Ia., ships daily 6 to 12 cars of No. 2 hard wheat.

The new elevator at Woonsocket, S. D., has been completed.

Knapp Bros., grain dealers at Bertrand, Neb., have sold out.

A new grain firm has started in business at Parkersburg, Ia.

An elevator is being built at Winkler, Man., by Mr. McMillan.

A 10,000-bushel grain elevator is being built at Jewell City, Kan.

The Goffs Grain Company is building an elevator at Goffs, Kan.

S. M. Durand has started in the grain business at Durand, S. D.

The new elevator at Stanton, Minn., has been opened for business.

J. U. Miner & Co. of Bowdle, S. D., have finished their elevator.

S. McLeod will build an elevator at Prince Albert, Sask., Canada.

R. F. Lyons is building an addition to his elevator at Carberry, Man.

The new horse power elevator at Clarkfield, Minn., has been completed.

The new grain elevator at Grand Blanc, Mich., has just been completed.

Two banks at Alma, Neb., in one day paid out \$4,000 on grain checks.

G. W. Van Dusen & Co. are building an elevator at Minneota, Minn.

The "Minnesota & Dakota Elevator" at Perley, Minn., has been opened.

Careless threshing has ruined the crops of many farmers in Minnesota.

The elevators at Pembina, N. D., are doing the heaviest business in years.

The elevator at Berwick, Kan., has been raised and greatly improved.

Noah F. Gorsuch, grain dealer at Kansas City, Mo., failed September 19.

Grain buyers at Pullman, Wash., have had great difficulty in getting cars.

A scarcity of cars exist at Wheatland, N. D., and both the elevators are full.

E. J. Webber has commenced work on a new elevator at Fergus Falls, Minn.

P. Emmert has sold his elevator at Osco, Ill., and moved to Newton, Ia.

The business men of Jasper, Minn., claim that the elevator men are not paying as high a price for grain as at

other points and have asked the Great Northern Railway Company to interfere.

S. L. Williams will put up a grain elevator at Shenandoah Junction, W. Va.

The Allen & Dumas Company is building an elevator and mill at Juliette, Ga.

A 10,000-bushel elevator is being built at Jasper, Minn., by E. A. Brown.

A grain elevator is being built in connection with the flour mill at Sanborn, Ia.

The business men of Ulysses, Neb., are talking of building a grain elevator.

Schreckengust & Dickerson, grain dealers at Rising City, Neb., have sold out.

The Endirlin Elevator Company at Sheldon, N. D., will build a grain elevator.

M. Philip, dealer in grain and farm machinery at Richmond, Minn., will sell out.

The York Brewing Company will build a brewery at York, Pa., costing \$60,000.

Warren, Miles & Co., grain dealers of Des Moines, Ia., will build a grain elevator.

F. E. Hawley is putting in dump scales at the "National Elevator" in Clin'on, Minn.

The "Interstate Elevator" at Brandon, Minn., has been leased by Johannes Hanson.

Thomasson & Co., grain dealers at Chattanooga, Tenn., have dissolved partnership.

The South Omaha Brewing Company will build a malt house at South Omaha, Neb.

Loudoun & Montgomery will build an elevator at Prince Albert, Sask., Canada.

The Lake Charles Rice Milling Company will build a rice mill at Lake Charles, La.

F. A. Brown's new elevator at Red Lake Falls, Minn., is rapidly nearing completion.

John Bisbee is about to build an elevator at St. James, Minn., to hold 60,000 bushels.

T. S. Beach, grain dealer at Orange City, Ia., has been succeeded by Geo. C. Oelrich.

The new elevator at Holdrege, Neb., has been completed and placed in operation.

Parrish & Lindsay of Brandon, Man., will build elevators at Oak River and Hamiota.

Drews Bros. have moved their elevator from Lakeland to Stillwater, Minn., on barges.

Hamilton & Kincaide of Wilsonville, Neb., have put in a Dickey Overblast Separator.

The new grain elevator at Buffalo Hart, Sangamon Co., Ill., is just being completed.

Murdoek & Wilson, dealers in grain and coal at Oconee, Neb., have dissolved partnership.

Stedman, Marshall & Co., elevator men at Sauk Centre, Minn., have dissolved partnership.

James Baskirk of Loraine, Neb., is putting in a complete outfit of elevator machinery.

A gas engine will be placed in the new elevator at Byron, Ill., to drive the machinery.

Stockdale & Dietz have just completed a new elevator at Wolcott, Ia., at a cost of \$2,500.

A 20,000-bushel elevator is being built at Columbia, N. D., by the Porter Milling Company.

The Marfield Elevator Company has placed a gas engine in its house at Minneota, Minn.

The machinery is being placed in the elevator of the "Daisy Mill" at West Superior, Wis.

Johnson & Marshall will build an elevator at Red Lake Falls, Minn., on the Great Northern.

The farmers' warehouse at Fairmont, Ia., has been opened with R. M. Tyler as manager.

J. E. Russell & Co., grain dealers at Somerset, Kan., have been succeeded by J. E. Russell.

E. B. Wilber, a member of the Buffalo Merchants' Exchange, has started in the grain trade.

F. W. Matson is in charge of the Interstate Grain Company's warehouse at Clara City, Minn.

Briggs & Duel, elevator men at Shelbyville, Mich., have been succeeded by N. W. Briggs.

The Stettin Elevator Association of McIntosh, Minn., has begun work on its new grain house.

The "Red River Valley Elevator" at Crookston, Minn., is being moved nearer the other elevator.

Quirk's warehouse at Hartland, Minn., has been purchased by Mr. Corson of New Richland.

Farmers are hauling 8,000 bushels wheat daily to Garfield, Wash., storing most of it for a rise.

The Canby Farmers' Elevator Company has been incorporated at Canby, Minn., to do a grain business.

Capital stock, \$100,000; incorporators, Lars Gjorvig,

James Little, Elling Vold, John Paulson, A. Berges; Anton Anderson and Samuel Tilbury.

Joseph Greulich and Kittenhofen Bros. of Appleton have bought an elevator at Ashland, Wis.

J. & H. Eimers, grain dealers at Humphrey, Neb., have been succeeded by Robeler & Peters.

Grain men at Obiowa, Neb., find it difficult to secure cars enough to ship the grain they take in.

The Cleveland Linseed Oil Company is about to build at Chicago an oil factory costing \$250,000.

Kern & Gardner, grain dealers at Bellevue, O., have placed cleaning machinery in their elevator.

The Peter Heid Grain Company of Appleton, Wis., has bought the "Clough Elevator" at Ripon.

W. G. Girrback of the Northwestern Grain and Feed Company, Minneapolis, Minn., has sold out.

Gasoline engines are used in four houses of the S. Y. Hyde Elevator Company of La Crosse, Wis.

Work has been commenced on the 10,000-bushel elevator of Craig & Matthews at Princeton, Minn.

The Great Western Elevator Company is building a 500,000-bushel elevator at Minneapolis, Minn.

W. J. Holbrook represents the Northwestern Elevator Company in the grain market at Rugby, Minn.

J. M. French, dealer in grain, wool and groceries at Burlington, Mass., has sold his grocery business.

John W. Flood, at Goddard, Kan., has adopted the Dickey Overblast Separator for his new elevator.

Messrs. Eastman & Miller are having all they can do to receive the grain being marketed at Elkton, Minn.

The Northern Grain Company will enlarge its elevator at Hayward, Wis., and put in cleaning machinery.

The two warehouses at Monson, Cal., are full of wheat and the platforms outside are stacked to the eaves.

A. S. Bright, dealer in grain and coal at Cumberland, Ia., has been succeeded by Bright & Worthington.

Pearce & Booth, dealers in grain and hay at Bartow, Fla., have been succeeded by Booth, Edward & Co.

Spencer & Hancock, dealers in grain and flour at Atlanta, Ga., have been succeeded by W. A. Hancock.

F. L. Kidder & Co. of Detroit, Mich., have quit the manufacture of linseed oil and sold their machinery.

J. A. Cummings of Delhi, Minn., has removed his engine and installed a horse power to elevate his grain.

At Roscoe, Ill., and Ong, Neb., the A. P. Dickey Manufacturing Company's grain cleaners are being put in.

J. A. Pratt, at Wayne, Ind. Ter., has adopted the A. P. Dickey Manufacturing Company's End Shake Mill.

A grain warehouse will be built by the Consolidated Milling, Elevator and Power Company at Bloomer, Wis.

Wallace & Thacher, grain commission dealers at New York, N. Y., have been succeeded by W. S. Wallace & Co.

The three elevator companies at Casselton, N. D., stopped buying wheat September 15, their houses being full.

The Milwaukee Malt and Grain Company is building an elevator and malt house costing \$60,000 at Milwaukee, Wis.

Speltz & Klosterman, grain dealers at David City, Neb., have dissolved partnership, Mr. Speltz continuing business.

The machinery for the "Farmers' Elevator" at McIntosh, Minn., has been placed in position ready for business.

The Riola Farmers' Union of Riola, Vermilion Co., Ill., has been succeeded by the Enterprise Grain Company.

The Cleveland Linseed Oil Company will build an oil mill at Waukegan, Ill., on a site recently bought for \$33,678.

Two elevators will be built at New Orleans, La., by the Illinois Central and Louisville & Nashville Railroads, it is said.

A freight train ran into the ditch at Farley, Dubuque Co., Ia., October 3, and four cars of wheat were smashed.

The "St. Anthony Elevator" at Minneapolis, Minn., has been equipped with a No. 6 Barnard & Leas Milling Separator.

Faragher Bros. and John Ulveling are building an elevator at Adrian, Minn., and have completed the stone foundation.

P. V. Boomersshine of Lykins, O., has just put in one of the A. P. Dickey Manufacturing Company's Warehouse Mills.

The old elevator of Stockdale & Dietz at Walcott, Ia., caught fire September 24, but the blaze was promptly extinguished.

At its annual meeting held recently the Van Dusen-Harrington Company, dealing in grain at Minneapolis, Minn., elected C. M. Harrington, president; Fred C. Van



Dusen, vice-president; and G. F. Ewc, secretary and treasurer.

The Milford Produce Company has been organized at Milford, Mich., to deal in grain. Its new elevator is just being finished.

The "Knapp Elevator" at Toledo, Tama Co., Ia., has been bought by the citizens, who will make many needed improvements.

Warren, Miles & Co., grain dealers at Des Moines, Ia., have incorporated themselves into a stock company with \$30,000 capital.

Falk, Jung & Borchert of Milwaukee, Wis., will rebuild their brewery, malt house and elevator, which were recently burned.

The new elevator at Hartland, Wis., has been completed. It is eighty feet high, and has 60,000 bushels' storage capacity.

Out of the assets of C. W. Seefield, the grain dealer of St. Charles, Minn., who failed recently, the assignee will get a fee of \$1,700.

J. N. Cooley has taken charge of the new grain warehouse at Bowdle, S. D., just completed by M. T. Lightner of Roscoe, S. D.

The farmers in the vicinity of Berthoud, Colo., have stored their new wheat in the elevator at that place for an advance in prices.

Parrish & Lindsay of Brandon, have bought D. P. McLaren's elevator at Beresford, Man., and are equipping it with new machinery.

Winnipeg received 304 cars of inspected wheat in the week ending October 1, against 94 cars for the corresponding week last year.

Winnipeg received in the two weeks ending September 24, 182 cars of wheat, against 76 cars for the corresponding two weeks last year.

The grain scoopers employed in the Anchor Line Elevators at Erie, Pa., have arranged for a picnic with a program of athletic sports.

Theisen & Nagel of Artesian, S. D., are putting in an A. P. Dickey Manufacturing Company's Overblast Separator, made at Racine, Wis.

Mr. Neale, the elevator man at Neche, N. D., on September 29 received from farmers 5,500 bushels of wheat, all grading No. 1 Northern.

The Cannon Falls Grain Company of Cannon Falls, Minn., has been succeeded by F. R. Anderson, the other partner, O. E. Falck retiring.

C. H. Whittaker, the grain dealer of Ellsworth, Ill., is about to build an elevator to be equipped with the best machinery for handling grain.

The Northern Pacific Railroad Company has built a loading platform 200 feet long at Sidney, N. D., so ten cars can be loaded at one time.

Grove & Means, grain dealers at Saybrook, Ill., have been succeeded by the Middle Division Elevator Company with James Hudson in charge.

The S. Y. Hyde Elevator Company of La Crosse, Wis., is building a second elevator at Woonsocket, S. D., to have 15,000 bushels' capacity.

The elevator men at Howard Lake, Minn., are compelled to move their houses 30 feet to make room for a side track of the Great Northern.

The "Marfield Elevator" at Tyler, Minn., of which J. R. Ream has charge, has been thoroughly overhauled and made ready for the new crop.

Criess Bros. of Sutton, Neb., have put in two of the Dickey Manufacturing Company's new overblasts, one of which they are using to clean flax.

J. T. Fueller of Savanna, Ill., has recently bought a No. 4 Victor Corn Sheller of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Heidenreich Company of Chicago, architects and builders of grain elevators, have begun work on the new "Dakota Elevator" at Duluth, Minn.

An elevator of 200,000 bushels capacity will be built at Kansas City, Mo., by Kehlor & Pierson, the millers. It will be 125x145 feet and 85 feet high.

Hiestand, Warner & Co., of Spokane, Wash., have warehouses at eight different points, and expect to handle 2,000,000 bushels of grain this season.

Farmers' deliveries of grain at Preston, Minn., continue heavy. In one week, recently the bank of Preston paid out over \$4,600 for grain tickets.

J. Bickhart of St. Paul, Ind., has recently bought one Victor Corn Sheller and Cleaner of the Barnard & Leas Manufacturing Company of Moline, Ill.

Milwaukee has more grain in elevators than for several years, and shipments of wheat, oats and barley promise to be large before the close of navigation.

The Rushford Elevator Company of Rushford, Minn., has put in a double separator made by the A. P. Dickey Manufacturing Company of Racine, Wis.

W. D. McGuire and other stockholders in the Frye Grain Company of Rochester, N. Y., have brought suit against the directors of the company for \$2,000 lost or wasted by their mismanagement. Defendants claim

the company was really never completed and had done no business and that the payment of \$10,000 to Elmer E. Frye by stockholders was simply a loan.

F. H. Ryan & Son, commission grain dealers, and the John Thyson Company of St. Louis, Mo., have been succeeded by the Ryan Commission Company.

The ruins of the elevators which recently burned at Oswego, N. Y., remain just as the fire left them. As yet nothing has been done toward rebuilding.

Stockdale & Dietz of Waleott, Ia., have recently bought one No. 2 Barnard Elevator Separator of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Midland Elevator Company has been incorporated at Chicago. Capital stock \$50,000; incorporators Eugene H. Dupee, Arthur A. Bliss and John J. Lynch.

The Chicago Hay Commission Company has been incorporated with \$10,000 capital stock by Jacob Cohn, Emanuel Staerk and Herman Cohn of Chicago.

Spencer & Collins of Firth, Neb., have recently bought a complete outfit of elevator machinery of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Star Elevator Company is about to build a large annex to its house at Minneapolis, Minn., but is having trouble to get concessions from the Omaha road.

At Byron, Mich., the Fred E. Chase Company has adopted the overblast separator, made by the A. P. Dickey Manufacturing Company of Racine, Wis.

Henry Harrison, now manager of the "Empire Elevator" at Kansas City, Mo., is about to build a large elevator in that city at an estimated cost of \$180,000.

An elevator will be built on the river at South Haven, Mich., by the Michigan Central Railroad Company, to transfer grain received by steamers from Milwaukee.

The Konrad Grain Company has been incorporated at Hartford, Wis. Capital stock \$5,000; incorporators, August Konrad, Philip Konrad and Rose E. Konrad.

Notwithstanding the annoying delay of cars Norton & Son of Tallula, Ill., in the eight weeks preceding September 14 shipped 95,000 bushels of wheat from that station.

Johnson, Brown & Co. are putting in the A. P. Dickey Manufacturing Company's Overblast Separators in their houses at Thor, Rutland, Sioux Rapids and Bradgate, Ia.

The A. P. Dickey Manufacturing Company of Racine, Wis., has recently put in warehouse grain cleaners at Omaha, Neb., Ackley and Sioux City, Ia., and Wallace, Mo.

Mr. Richards of Chicago is renewing his efforts to have his hopper scale grain transfer system adopted at Buffalo, N. Y. He has induced several capitalists to aid him.

Wm. Gieseke of Marshall, Minn., is putting in an Overblast Separator for flax and general use, made by the A. P. Dickey Manufacturing Company of Racine, Wis.

The Crowell Lumber and Grain Company of Blair, Neb., has bought the entire business of Fuller & Fuller, dealers in grain, lumber, coal and live stock at Scribner, Neb.

The Warren Grain Commission Company has been incorporated at Eddy, N. M. Capital stock, \$50,000; incorporators, J. L. Warren, R. B. Armstrong and K. A. Gagg.

Thos. Cochrane & Co. of Ong, Neb., are having some repairing done and a new cleaner put in by J. A. Campbell & Son, designers and builders of grain elevators, of Lincoln, Neb.

Hardwick & Surbaugh of Wakenda, Mo., have recently bought one Little Victor Corn Sheller and Cleaner made by the Barnard & Leas Manufacturing Company of Moline, Ill.

T. M. C. Logan of Onawa, Ia., has recently bought full line of elevator machinery including grain cleaners all made by the Barnard & Leas Manufacturing Company of Moline, Ill.

The merchants of Sioux Falls, S. D., believe that the grain dealers are not paying as high prices as at other points, and talk of putting a wheat buyer on the street to run prices up.

J. R. Cameron & Co., who last year succeeded to the business of Caesar & Co., grain dealers at Seattle, have made their headquarters at Tacoma, Wash., with W. C. Ripley in charge.

The Cargill Elevator Company has placed in its new elevator at Green Bay, Wis., an Improved Lewis Gas and Vapor Engine made by the Webster Manufacturing Company of Chicago, Ill.

The Antonito Elevator Company has been incorporated at Antonito, Colo. Capital stock \$3,000; incorporators J. J. Corbett, Lafayette Head; E. L. Myers, F. B. Hatfield and C. A. Moore.

The South Chicago Elevator Company has been incorporated at South Chicago, Ill. Capital stock \$300,000; incorporators John R. Cohrs, Stewart Spaulding and Charles G. Galther.

Bessie I. Van Doren has brought suit in the District Court at Minneapolis, Minn., against Conover, Gee & Co., W. P. Hinkle, the Washburn-Crosby Company, and the Minneapolis Flour Mill Company, to collect money due

on wheat sold on the open board by Geo. Kirkbride to defendants. She shipped the wheat from her farm in Traverse county. The amount retained is claimed by the defense as a commission.

The Adams-Griffin Company, dealing in grain and provisions at Montgomery, Ala., has been succeeded by Leak & McElveen. J. R. McElveen of the new firm was a member of the old company.

R. P. Jennings of Table Rock, Neb., is having a No. 4 separator, conveyors, etc., put in with arrangements to clean grain from track. J. A. Campbell & Son of Lincoln, Neb., are doing the work.

Peoria, Ill., received during the first week in October 860,100 bushels of grain and shipped 624,400 bushels, compared with 478,100 bushels received and 427,519 shipped the same week last year.

W. A. Merigold has brought suit against the Northern Railway Company at Duluth, Minn., to recover possession of a carload of 600 bushels wheat, valued at \$500, wrongfully retained by defendant.

M. S. Watkins, the grain dealer of Kokomo, Ind., who disappeared a few months ago, when threatened with arrest for embezzlement, has returned home and given bonds for appearance in court for trial.

Brooks Bros.' elevator at Grafton, N. D., is being overhauled by A. E. Fodness, who will have charge when the repairs are completed. He is also taking out the steam engine and putting in horse power.

The Nye & Schneider Company of Fremont, Neb., has just put in one of the A. P. Dickey Manufacturing Company's large quadruple machines for taking smut out of wheat, at their cleaning house in Fulton, Ill.

The old "Boston Elevator" at Lake City, Minn., has been thoroughly overhauled, and in it has been placed the engine of the "Post Warehouse," the latter driving its power from the engine by means of a cable.

Morris H. Woolner, Samuel Woolner, Jr., and several eastern capitalists report that they will build at Peoria, Ill., the largest distillery in the United States. Five thousand bushels of grain will be consumed daily.

With the exception of the "Farmers' Elevator" all the houses at Norman, Minn., have given notice that any new wheat containing a mixture of old, poor, frosted, bin-burned or musty wheat will be graded the lowest.

W. B. H. Kerr, at Hartland, Wis., who has just finished one of the best elevators built in Wisconsin this season, has put in two of the A. P. Dickey Manufacturing Company's Quadruple Separators, made at Racine.

The large new elevator of Taylor Bros. at Cooper's Point, near Camden, N. J., has been equipped with a complete outfit of machinery by the H. W. Caldwell & Son Co., of Chicago, who also furnished the power plant.

Thomas McBeth of Grover, S. D., will build an elevator. The railroad company refused him a site but the railroad and warehouse commission met at Watertown September 28, and condemned sufficient ground for the purpose.

The Red River Valley Elevator Company, at its annual meeting in Minneapolis, Minn., recently elected George Rupley, president; W. H. Hinkle, vice president; E. E. Mitchell, secretary and treasurer, and L. D. Marshall, superintendent.

The grain scoopers at the "Wheeler Elevator" at Buffalo, N. Y., threatened to strike recently unless the boss shoveler was discharged, claiming he had been taking money every week which by right belonged to them. The boss was discharged.

The I. & E. Greenwald Company of Cincinnati, O., has recently bought one No. 2 Barnard Warehouse Separator, one No. 2 Victor Corn Sheller, and one No. 2 Victor Corn Cleaner of the Barnard & Leas Manufacturing Company of Moline, Ill.

In the past year seven new grain elevators have been completed and placed in operation at Kansas City. The Missouri, Kansas & Texas Trust is about to let contracts for two more elevators, both of 75,000 bushels' capacity, one costing \$18,000, and the other \$15,000.

The elevators at Cokato, Minn., have been opened for business, with J. A. Eklund in charge of Cargill's, J. Ojanpera in charge of the St. Anthony & Dakota, Andrew Johnson in charge of Osborne & McMillan's, and J. Nygren in charge of the "Farmers' Elevator."

The Meservey Elevator Company has been incorporated at Meservey, Cerro Gordo Co., Ia. Capital stock \$10,000; incorporators, Conrad Bier, president; James E. Hill, secretary; Jacob Nissen, Fred Ziemon, G. Wickersham, R. Stearns, F. L. Lemke, George Bier, F. Paul and W. F. Paul.

Mr. Pankratz, of Spring Valley, built a grain house at Freeman, Minn., close to the track of the Chicago, Milwaukee & St. Paul railroad in open defiance of the company. But before daylight next day the house had been moved, by order of the railroad company, 200 feet from its right of way.

In the litigation of the Union Elevator Company of Council Bluffs, Ia., it was alleged that the Union Pacific and Northwestern Railways had an unlawful agreement with Frank H. Peavey, the manager of the elevator, to give him a rebate of two cents per hundred on all grain shipped over those two roads; and the court ordered Peavey to fetch his books for an investigation. At a



hearing September 17 Peavey answered that there was no such contract, and that he had no knowledge of any books of account of the kind referred to by plaintiff.

At the annual meeting of the Farmers' Grain and Stock Company at Hooper, Neb., October 8, 225 stockholders were present and they unanimously re-elected the old board of managers with Herman Havekost president, and Jacob Bodewig secretary. The net gain for the year, \$708, was added to the surplus.

J. A. Campbell & Son of Lincoln, Neb., designers and builders of grain elevators, have recently made a contract with J. M. Sewell & Co. of Juniata, Neb., to build a 12,000 bushel elevator with 25-horse power boiler and engine, sheller, cleaner, separator and facilities for receiving and cleaning grain from track.

Two years ago many farmers who were active in the alliance at Hollywood, Minn., subscribed for stock in a farmers' elevator company which was being organized. But the company lost money, and now the gullible farmers have been summoned to appear in the district court in Hennepin county to pay up their shares of the loss.

The Barnard & Leas Manufacturing Company of Moline has recently sold Victor Corn Shellers to Lynch & Co. of Sheldon, to Frost Manufacturing Company of Galesburg, to Highland Milling Company of Highland, and Victor Corn Cleaners to the above, and to the Mt. Pulaski Grain Company of Mt. Pulaski, all in Illinois.

At its annual meeting held in Minneapolis, Minn., recently, the Northwestern Elevator Company re-elected its officers as follows: D. M. Robbins, president; T. B. Walker, vice-president; C. A. Magnusson, secretary; A. B. Robbins, general manager. The foregoing and W. D. Gregory, W. J. Miller and E. J. Phelps are the directors.

The Union Elevator Company of Minneapolis, Minn., recently elected officers as follows: H. W. Pratt, president; J. S. Pillsbury, vice-president; C. K. Sidle, treasurer; George H. Barwise, secretary. The board of directors consists of A. F. Gale, G. W. Porter, H. W. Pratt, S. D. Cargill, C. A. Pillsbury, J. S. Pillsbury and C. K. Sidle.

The Lake Superior Elevator Company has filed its answer to the suit brought at Duluth, Minn., by the owners of the steamer D. W. Rust for damages sustained by the falling of a conveyor gallery. Evidence was introduced to prove that the elevator employes had given notice of the danger three times, and that the man in charge of the steamer refused to have it moved.

Oakesdale, Wash., has received over 100,000 bushels of grain this season, mostly wheat with some oats and barley, and before the rush is over will have taken in a million bushels. The largest firms in the business there are S. B. Sweeney, Hiestand, Werner & Co., Enterprise Warehouse Company, Farmer Alliance Warehouse, Northern Pacific Elevator Company and the Pacific Coast Elevator Company.

A. C. Davis & Co. of Topeka, Kan., are building a cleaning and storage elevator of 200,000 bushels' capacity on the Rock Island road. Ample track room is being provided. The elevator occupies 40x120 feet of ground space and when completed will be 70 feet high in the storage department and 112 feet high in the cleaning department. Special attention is being given to the cleaning machinery.

Templeton & Scoular, grain and lumber dealers of Superior, Neb., and Webber, Kan., will make extensive improvements and additions to the elevator at Webber in the near future. It is announced that the junior member of the firm will take the entire management of the elevator and yards at Webber. Mr. Scoular is also a member of the firm of Scoular & Cormack, Odell, Neb., and has resided there for the past three years.

The Tacoma Warehouse & Elevator Company of Tacoma, Wash., has placed a new inside conveyor running the entire length of the house and can now convey grain from any part of the mammoth building to either of the conveyors leading to the ship. The warehouse is 514 feet long, three and one-half stories high, and has capacity for 1,250,000 bushels. The chain and belt conveyors can carry over 30,000 sacks per day into a ship's hold. A. M. Ingersoll is manager of the company, and C. H. Marble secretary.

The second ordinary general meeting of the City of Chicago Grain Elevators was held September 16 at Winchester House, Old Broad street, London, Mr. John Aste presiding.—The chairman, in moving the adoption of the report, said the directors regretted that the hopes entertained at the last meeting had not been realized, and although the conduct of the business had resulted in profit sufficient to pay all expenses, the debenture interest, and to provide for a sinking fund, it had left nothing wherewith to pay a dividend on the shares of the company. The directors had reason to hope that they had reached the turning point in their affairs.

The following is a list of stations on the Dakota division where the Northern Pacific has voluntarily put up loading platforms this season, or made graded driveways, rail high and 12 feet wide. Platforms have been erected at Casselton, Wheatland, Bloom, two at Canfield, and a double one at Sidney, at the Great Northern crossing, capable of accommodating ten teams at once. Driveways have been put in on the main line at Tower City, Valley City, Eldridge, Tappen and Apple Creek. On the Fargo & Southwestern, platforms have been erected at

Cotters, Warren, Horace, Buttzville and Elliott, and driveways at Englevale and Valley Junction, also at Cooperstown. On the Jamestown & Northern platforms have been built at Carrington, Barlow, Sheyenne, and driveways at Leeds, Brinsmade and Sykeston. In some localities farmers say the driveway is preferable to platforms.

A small premium for December above cash wheat, and much of the time an actual discount for December wheat below cash prices, has stimulated country buyers to forward their supplies instead of selling them for the later month. This does not mean that they did not sell against purchases, for they always do that who do a large business, for safety, but they buy in such forward sales when the spot wheat arrives and is sold. Of course there are a few points where the elevators contain considerable grain. There always are, due to one cause or another, but the inducements of the markets this season have caused some efforts to bring forward the country wheat.—*Minneapolis Market Record*, Oct. 5.

William S. Williams of New York, on September 28 began suit in the Circuit Court against Robert Lindblom of Chicago, and N. G. Miller of New York, on a judgment for \$63,705.16. The judgment was recently obtained in New York on an accounting between them as partners of the firm of Robert Lindblom & Co., doing business on the Board of Trade from July, 1883, to April, 1884. Attorney A. C. Barnes, Williams' counsel, says that the partnership article called for \$300,000 and that Lindblom and Van Kirk were to contribute \$150,000 in cash. They put in the assets of an old firm which the new firm was to succeed. Williams claims that the assets were not sufficient, and that the \$150,000 cash contributed by him is all that saved the old firm from failure. It turned out that the old firm had many open trades which were closed out after the organization of the new firm at a great loss. Williams alleges that Lindblom and Van Kirk should bear that loss and not the new firm. Lindblom avers that the new firm took the assets and assumed the liabilities of the old firm.

## OBITUARY

S. D. Smith of Coover & Smith, grain and flour dealers at Baltimore, Md., is dead.

J. E. Swanson, grain dealer at Carlton, Ore., was struck dead by apoplexy in Portland recently.

B. B. Connor of the old firm of B. B. Connor & Co., dealers in grain and feed at Louisville, Ky., is dead.

John Adams, dealer in grain and flour, and member of the New York Produce Exchange, died in Brooklyn recently, leaving a widow and six children. Mr. Adams was a Scotchman, and was highly respected for his business integrity. Aged 58 years.

All who are not satisfied with the dilatory methods of transportation companies should place their names on "A Protest, A Petition," published elsewhere in these columns.

Clover seed amounting to 113,032 pounds was exported in August, against 359,916 pounds in the preceding August; and 6,023,317 in the eight months ending with August, compared with 10,471,325 pounds in the corresponding months of 1891.

Hay amounting to 2,822 tons was exported in August, against 2,536 tons in August, 1891; and during the eight months ending with August 23,669 tons, valued at \$390,201, was exported; compared with 18,351 tons, valued at \$312,703, during the corresponding months of 1891.

North Dakota will eventually become as extensively known as a corn raising state as it is now a wheat raising state. This year finds quite an acreage of corn in some parts of the state, and it has all matured in good shape.—*Walsh County Record*. True, but it is hardly safe to count on such seasons as this year after year. Corn in this latitude is a risky crop.—*Argus, Fargo*.

Hay amounting to 4,023 tons was imported in August, against 6,192 tons in August, 1891; and during the eight months ending with August 54,194 tons, valued at \$534,121, was imported; compared with 38,483 tons, valued at \$279,155, during the corresponding period of 1891. Of foreign hay we re-exported in the eight months 151 tons, against 9 tons in the corresponding period of 1891.

Wheat aggregating 26,979 bushels was imported in August, against 360 bushels in the preceding August; and during the eight months ending with August 1,005,597 bushels was imported; compared with 316,292 bushels during the corresponding period of 1891. We re-exported 71,865 bushels in August, against none in August, 1891; and 1,666,596 in the eight months, against 445,498 in the corresponding months of 1891.

Hops amounting to 6,476 pounds was imported in August, against 41,294 pounds in August, 1891; and during the eight months ending with August, 1,434,864 pounds, valued at \$549,961, was imported; compared with 1,678,344 pounds, valued at \$771,112, during the corresponding months of 1891. Of foreign hops we re-exported in August 1,336 pounds, against 6,171 in August, 1891; and 94,935 in the eight months, against 123,173 in the corresponding eight months of 1891.

## PRESS COMMENT.

### TO SPECULATE SUCCESSFULLY.

To be a successful speculator in grain products it is necessary, first to make a careful calculation whether the market ought to advance or decline and then "go the other way." One can be sure to make a certain point by going to the right or to the left, if he travels in a circle, but to reach a gain in wheat speculations it seems necessary that he go always in the direction opposed by common judgment. This is not so very hard to understand either, for when the common judgment has finally accepted a fact in grain condition, it is too late, for the market has already changed, by anticipation, as much as the new conditions will justify.—*Minneapolis Market Record*.

### BLOWING ABOUT BIG YIELDS.

Just so long as newspaper men continue to blow about the big yields here and there obtained we may expect to see low prices rule. Grain buyers are on the lookout for just such items. It furnishes them the information they require free of cost. In their zeal to advertise the country—which is a commendable spirit—newspaper editors overshoot the mark. They do it at the expense of the farmer who has wheat to sell. Besides, these reports of big yields here and there are very misleading. If a farmer has anywhere from six to twelve bushels of wheat to the acre, he is not very liable to publish it. He thinks it may be taken as evidence of bad husbandry.—*Toledo Market Report*.

### THE WHEAT SIREN.

The impression has found lodgment in the brains of the multitude that what in the seventies is the very ideal of speculative investment, and big with pregnancy of unborn fortunes. There is therefore little wonder if the affections of merchants, produce and grain dealers, millers and flour dealers, physicians and dentists, lawyers and artists, bank clerks and stock brokers, railway officials and insurance men, east end chimney sweeps and west end barbers, are all centered upon the interesting condition of that siren of speculation—wheat; and for the safe delivery of her progeny of expected profits, each is watching with intense interest, in anticipation of receiving a recognition of paternity as a result of his marginal investment.—*Montreal Trade Bulletin*.

### THERE WILL COME A SURPRISE.

History has been known to repeat itself. The Kansas bull of last year brought loss and chagrin upon the wheat farmer. It pricked his pride as well as impoverished his pocket. He will have no more of it—this season. The only way to convince him that the future of the market will justify the holding policy is to urge him to sell, and sell, and be done with it. When this is accomplished, and all the wheat gathered in by the traders and elevator men, through the assistance of the little Bradstreet figuring machine there will come a surprise. If the English farmer still holds his wheat he will have a turn at smiling. But the American wheat farmer won't share this with him. He will have no interest in the higher prices of wheat.—*Cincinnati Price Current*.

### A POLITICAL FABRICATION.

No railroad company can lawfully refuse to furnish cars to any farmer or company of farmers who wish to ship wheat, and no railroad company can refuse the use of its right of way to any farmer or company of farmers who may desire to build thereon a grain house or elevator. Under this statute the farmers of Minnesota have established elevators of their own in nearly every wheat district in the state. The statement that the farmers of Minnesota are slaves of an elevator monopoly is a political fabrication which, not only the above statute, but the farmers themselves and their elevators, have proven to be false and malicious. These farmers' elevators have also punctured the political bubble that farmers are robbed exorbitant sums on weights and grades.—*Minneapolis Tribune*.

### "A GIGANTIC CONSPIRACY."

It is to be regretted that the exigencies of a political campaign should be deemed sufficiently important to warrant so reputable and generally admirable a journal as the *Chicago Herald* in publishing a wanton, false and absurd attack upon the reputation of certain millers and grain men of Minneapolis who have always stood high in the esteem of the world of commerce, and who have achieved distinction and success by the exercise of a high order of business talent, through perfectly legitimate channels. It is unnecessary to say that had these gentlemen been of the same political faith as the *Herald*, it would not have given publicity to the jumble of lies, innuendoes, misstatements and false deductions contained in that ignoble campaign document known as "A Gigantic Conspiracy," which becomes important only because of the medium through which portions of its contents have been made public.—*Northwestern Miller*.

"A Protest, A Petition" should be signed by every grain dealer who wants cars forwarded with dispatch.



# THE EXCHANGES

The ticking dummy ticker doesn't tick,  
And the speculators running it are sick.  
Three men, by inspiration,  
Got the ticker's combination,  
And tickled up the ticker "mighty slick."

—Chicago Times.

Memberships in the Chicago Board of Trade are selling at \$1,025@1,050.

The Chicago Board of Trade will continue its Saturday sessions until 1:15 o'clock.

Privilege trading in the vicinity of the Chicago Board of Trade has become very quiet.

The New York Produce Exchange, by a vote of 435 to 122, recently decided to build on its vacant land near the Exchange.

The St. Louis Merchants' Exchange and the New York Produce Exchange propose to exchange market quotations.

Tickets of membership in the New York Produce Exchange have declined from \$730 to \$675, and are renting at \$25 a year.

The Chicago Board of Trade will hold no session on Friday, October 21, in honor of the discovery of America by Columbus in 1492.

Secretary Rand of the Boston Chamber of Commerce has resigned, and Fred N. Cheney, now treasurer, is talked of for the position.

At a regular meeting of the directors of the Chicago Board of Trade it was decided, under Sec. 21 of Rule 2, that delivery notices shall specifically state the kind and grade of grain proposed to be delivered.

The Buffalo Merchants' Exchange has awakened to the necessity of improving the Erie Canal. Besides the \$500 voted by the exchange for the Erie Canal centennial celebration other subscriptions are being solicited.

After several weeks of consideration the Chicago Board of Trade has resolved to indefinitely postpone further consideration of the plan to cancel tickets of membership by paying a fixed sum upon the death of the holder.

At a general meeting of the Winnipeg Grain Exchange October 4 two amendments to the constitution were adopted. One provides that permits may be issued to clerks employed by members, to go on the floor for market quotations. The other amendment provides that \$14 must be deposited by an applicant for arbitration, to be forfeited in case he declines to go on with the case.

The Cincinnati Chamber of Commerce recently elected the following officers and directors: President, Brent Arnold; vice-president, Wm. E. Hutton; treasurer, Clifford B. Wright; secretary, Maurice J. Freiberg; directors, Casper H. Rowe, Albert Lackman, Peter Van Leunen, James B. Wallace, A. B. Vorheis. The annual report of Treasurer George H. Bohrer showed that the receipts were \$84,097 and expenditures \$69,448, leaving a balance of \$14,648.

The Board of Trade Mutual Benefit Association has been reorganized by the members of the old life insurance benefit association of the Chicago Board of Trade. All members of the old clubs not over 70 years of age can enter, and also the employees of members between the ages of 21 and 51 years. A. M. Bennett is secretary. Three hundred have joined. The assessments are graded. The plan of buying the certificates of deceased members for \$5,000 was decided by the board to be not practical.

A meeting was held in Winnipeg October 6 by representatives of the boards of trade of Winnipeg and the Northwest, to consider the grading and inspection of wheat, but resolved that C. N. Bell, secretary of the Winnipeg Grain Exchange, be requested to gather information on different systems of inspection, and action was deferred. The Canadian Pacific Railway was requested to provide switches and other requirements for the purpose of allowing proper drawing of samples and proper inspection in Winnipeg during daylight.

Albert M. Day of Counselman & Day, was suspended from the privileges of the floor for 30 days September 26 by the directors of the Chicago Board of Trade, for refusing to give the name of one of his clerks who had informed him that a certain firm was dealing in puts and calls. A few days previous Mr. Day happened to meet R. G. Chandler, vice-president of the board, in a railway train going out into the country, and told him incidentally that one of his clerks had informed him of a trade of 150,000 puts made that afternoon by a prominent house. Vice-president Chandler brought the matter to the attention of the directors and Mr. Day was summoned to appear, but declined to name his man for the reason that he was not a detective and would not be made one; and, moreover, to give the name of the clerk would compel the clerk to expose his informant, the clerk of the house making the deal, who would either have

been disciplined or lost his job. The stand taken by Mr. Day is commended by many members. One member of the board who expected to be called up before the directors for privilege trading had injunction papers ready to serve to prevent summary action in his case.

The Minneapolis Chamber of Commerce recently elected Charles A. Pillsbury president; L. W. Campbell, vice-president; C. C. Sturtevant, secretary; H. H. Thayer, treasurer; H. W. Pratt, T. M. McCord, Henry Poehler, L. R. Brooks and Charles J. Martin, directors for five years; P. O. Peterson, L. M. Sherman and Charles F. Crosby, arbitration committee, and William Pettit, F. S. Tenney and G. H. Daggett, appeal committee. President and vice-president were elected unanimously, but this is not to be taken as an indorsement by the exchange of Mr. Pillsbury's views and actions favoring the anti-option bill. It is only an expression of their faith in his personal integrity, and is, no doubt, highly valued by him, coming so soon after the publication of that infamous "Gigantic Conspiracy" pamphlet by unprincipled agitators in the Northwest.

## Fires, Casualties, Etc.

William Fairly was recently smothered to death in a grain elevator at Langdon, N. D.

Lewis S. Leon, dealer in hay and feed at Norfolk, Va., has suffered loss by fire. Insured.

A grain warehouse at La Grange, Stanislaus Co., Colo., was burned September 12. Loss \$14,000.

Park & Jamison, dealers in grain and hay at Denver, Colo., have suffered loss by fire. Insured.

John H. Reid, dealer in grain, hay and feed at Chicago, suffered a loss of \$600 by fire September 16.

An elevator at Pesotam, Ill., was burned at night, September 11. Loss \$4,500; insurance small.

A warehouse valued at \$3,000 was recently burned at Walla Walla, Wash., with 4,500 bushels of wheat.

The "Northern Pacific Elevator" at Canfield, N. D., was burned September 29 with 15,000 bushels of wheat.

C. D. Budlecke, a wealthy grain dealer of New Orleans, La., committed suicide October 10 by drowning himself.

The works of the American Flax Fiber Company at Austin, Minn., were burned September 30. Loss \$20,000; no insurance.

The "Alliance Elevator" at Delta, Neb., owned by August Claire, was burned on the morning of September 22. Loss \$2,500.

John Hamilton, a farm laborer, fell off a ladder in Settlementier & Sons' elevator at Litchfield, Ill., September 9, breaking his neck.

The engine room of the "Victoria Elevator" at Minneapolis, Minn., was damaged to the extent of \$200 by a fire that broke out October 3.

The "McBean Elevator" at Virden, Man., was slightly damaged by fire September 28. The elevator was ignited by burning buildings near by.

The warehouse of Joslin & Co., at St. Paul, Minn., was burned September 27 with \$30,000 worth of grain, hay and feed. Insurance \$20,000.

The "Minneapolis & Northern Elevator" at Grand Harbor, N. D., was burned September 14. The house was empty. Loss \$5,000; insured.

A bin in the "Capital Elevator" at Topeka, Kan., burst September 26, scattering 6,000 bushels of grain, of which 50 bushels were lost. Damage, \$200.

A. G. Hall's grain elevator at Alden, Minn., was burned at midnight September 23, with the flour mill adjoining. Mr. Hall's loss is \$3,000 with no insurance.

Jerome Davidson's grain elevator at Mahomet, Ill., was burned September 23 with 20,000 bushels of corn and other grain. Loss \$25,000; insurance \$15,000.

The elevator of the Sewell Company at Juniata, Neb., was burned on the evening of September 29, with the flour mill nearby. Insurance on elevator \$6,000.

Joseph Sebesta while fixing a grain conveyor in the elevator at Toledo, Ia., recently, had his right foot caught and lost two toes. After a few days he was able to look after his business.

A grain shed and stable at Columbus, O., owned by Seeds & Scott, were burned at 9 P. M., September 14. Loss \$1,500; insured. Two houses were burned. The fire was of incendiary origin, and only three months ago their stable on the same site was burned. Their grain elevator near by was saved.

H. D. Lane & Co.'s grain elevator at Tama, Ia., containing 20,000 bushels of oats, staggered October 8 and would have fallen had not timbers been used to prop it up. As it was the foundation piers stood, or rather leaned at an angle of 45 degrees. Considering how light

oats are it is remarkable that such an accident should occur, and the collapse could only have been due to faulty construction by some blundering barn builder who had no reputation to lose.

F. M. Hall's elevator at East Lynn, Vermilion Co., Ill., was burned on the afternoon of September 29, with 10,000 bushels of corn, 10,000 bushels of oats, one car of oats and two cars of hard coal.

Burglars entered Coon & Titus' grain office at Rantoul, Ill., early in the morning of October 1, and made an unsuccessful attempt to burst the safe. Postage stamps and a coat worth \$10 were taken.

Louis Smith had three fingers of his right hand badly mashed while hocking a car loaded with grain at Johnson & Brinkman's new elevator at Rosedale, Kan., October 5. Amputation was found necessary.

Frank L. Welton of Troy was repairing some machinery in a grain elevator at Purcell, Kan., October 3, when his whiskers caught and were wound on a swiftly revolving shaft. His chin and one side of his face were torn off.

C. E. Achorn's elevator at Primghar, Ia., burst early on the morning of September 29, throwing over 8,000 bushels of barley out on the railroad tracks. No one was hurt. The part of the elevator that gave way was newly built. Will elevator men ever lose faith in barn builders?

Edward Renaud, a youth of 17, was shoveling wheat from a bin into a chute in Whitney's elevator at Rochester, N. Y., on September 20, when he slipped and fell into the chute. Hearing his cries the other employees stopped the machinery and after half an hour succeeded in taking him out from under the heavy pile; but he was dead.

While the steamer Hazelbranch, lying at the new "Texas & Pacific Elevator" in Westwego near New Orleans, La., was being loaded with grain September 24 a bulkhead feeder collapsed with about 800 bushels of grain and buried alive four longshoremen. Two were taken out unconscious, severely injured. Two others were taken out alive but soon died.

The "Valleau Elevator" at Decorah, Ia., owned by Mrs. H. S. Weiser and leased by M. H. Merrill, was burned at noon September 19. The fire started in the cupola and burned down into the center of the building. After two hours of hard work the town firemen put the flames out, saving the machinery, the frame of the building and a lot of grain which, however was wet. Receipts of grain had been large, and Mr. Merrill had a considerable quantity uninsured. Loss \$10,000; building fully insured.

## PERSONAL

I. E. Lobeck has taken charge of the Atlantic Elevator Company's house at Lowry, Minn.

H. O. Hawkins of Park River has moved to Casselton, N. D., to take charge of an elevator.

Amos Jacobson has been appointed inspector for the Cargill Elevator Company at Benson, Minn.

George Miller has taken charge of the Hodge & Hyde Elevator Company's elevator at Roswell, S. D.

George Warner has taken charge of the Red River Valley Elevator Company's elevator at Conway, N. D.

Mr. Ramstad, who formerly had charge of the elevator at Jamestown, is running the farmers' elevator at Kinred, N. D.

T. W. Elgie has taken charge of the "Van Dusen Warehouse" at Pierre, S. D., for a St. Paul firm which has leased it.

John G. C. Schlegel has for four years been buying grain at Baltic, S. D., for the Huntling Elevator Company of Sioux Falls.

Superintendent Marshall of the Red River Valley Elevator Company of Grand Forks, N. D., was recently elected general manager.

A. L. Ernst, of the Olson-Ernst Grain Company of Kansas City, Mo., was recently married to Miss Antoinette Wells at Constantine, Mich.

Mr. Beals has moved from St. Joseph, Mo., to Rosedale, Kan., near Kansas City, to take charge of Johnson & Brinkman's new elevator when completed.

A. B. Black, who has for six years been connected with the Minnesota State Grain Inspection Department, was recently appointed supervising inspector for the Minneapolis division.

A. W. Wilkins, who has for thirty-two years been connected with the "Angus Smith Elevators" at Milwaukee, has resigned to take an interest in a milling enterprise at West Superior, Wis.

E. A. Burrage has resigned his position as superintendent of the Northwestern Elevator Company and accepted a similar position with the Peavey Elevator Company to control operations in Southern Minnesota.

R. B. Jones, who has had charge of a house at Neche, N. D., for the Northwestern Elevator Company, has resigned and moved to Harlem, N. D., where the climate is milder, and is now operating the "National Elevator" at that place.



## Latest Decisions.

### Lawful Preference of Creditors.

It is not fraudulent for a debtor in failing circumstances to prefer certain creditors by conveying to them his stock of goods in satisfaction of claims amounting to the value of the goods. That is but a preference of creditors which the law permits the insolvent debtor to give, and the preferred creditors commit no fraud in accepting it, even if they know the effect will be to prevent the collection of other claims.—*Gilkerson-Sloos Commission Co. vs. Curnes, Supreme Court of Arkansas, 19 S. W. Rep. 1061.*

### National Banks Cannot Discount at Usurious Rates.

Since the U. S. Statutes provide that national banks shall forfeit all interest if they reserve more than is allowed by the laws of the states in which they are located, it is competent to show, in an action by a national bank on notes discounted by it, the money for which it bought them. And if the notes were originally discounted at usurious rates of interest, then the bank would not be entitled to recover any interest whatever on those notes.—*First National Bank of Springfield vs. Haulenbeck, 19 N. Y. Sup. 567.*

### Contract to Sell and Deliver Grain.

A written contract certifying that a person "hereby sells and agrees to deliver" to others at their warehouse all the grain harvested or to be harvested during the season by him on certain land, "wheat sacked in good, merchantable sacks," the purchasers to pay a certain amount per bushel, does not vest title in them; so that, for refusal of the person making the agreement to sell and deliver part thereof, the purchaser may sue for damages, but not for possession of the property.—*Hamilton vs. Gordon, Supreme Court of Oregon, 30 Pac. Rep. 495.*

### Fall of Scaffolding in Bin.

Several carpenters were employed in building bins in a grain elevator, in the course of which it was necessary for them to use scaffolds. The scaffolds rested on cleats on the inside of the bins, nailed on by them, and one of the carpenters was injured by the giving way of a scaffold, either because the cleats were insufficiently nailed or because the pieces resting on them were sawed too short. There was ample material for safe scaffolding at hand. Under the circumstances the carpenter was injured by the negligence of his fellow-servants and therefore not entitled to recover of the contractors.—*Thompson vs. Libbey, City Court of Brooklyn, 19 N. Y. Sup. 680.*

### Note to Pay for Bohemian Oats.

Where a promissory note was obtained by an alleged agent on the customary Bohemian Oats fraudulent scheme, which was sold to a bank, where the person who gave it was a depositor, but neither these facts nor the additional one that the note was discounted at a usurious rate of interest, would defeat recovery on it, the note having been negotiable before maturity for a valuable consideration. It was further contended by counsel that the note should be declared void on the ground of public policy. Had the action been brought by the original payee of the note, or by any person engaged with him in the scheme to defraud, that question would be considered, and, doubtless, in the administration of the well-established rule, neither party to the scheme would be permitted to use the court to help himself as against another party thereto; but the public would suffer through the proposed violation of the ancient law protecting commercial paper in the hands of bona fide holders for value before maturity quite as much as it would be benefited by an effort to apply the doctrine of public policy in condemnation of this transaction.—*McDonald vs. Johnson, Supreme Court of New York, 5th Department, 19 Sup. Ct. Rep. 443.*

### Future Contracts—Gambling.

The Supreme Court of Ohio held, in the recent case of *Lester vs. Buel*, that a contract whereby one of the parties is to have the option to buy or sell at a future time a certain commodity, on the understanding of both that there is to be no delivery of the commodity, the party losing to pay to the other the difference in the market price simply, is by common law, as well as by statute, in Ohio a "gambling contract," or wager upon the future price of the commodity, and therefore void. While rendering this decision, however, the court was careful to point out the distinction between such gambling transactions and legitimate transactions on the exchanges. It said (per Minshall, J.): "It is well settled that purchases or sales of commodities of any kind for future delivery are valid, although the seller may not own the commodity at the time the contract was made, and will have no other means of performing than by going into the market and making the requisite purchase when the time for delivery arrives. \* \* \* Legitimate transactions on the Board of Trade are of the utmost importance in commerce. Such contracts, whether for immediate or future delivery, are valid in law, and receive its sanction and all the support that can be given them. It is only against unlawful 'gambling contracts' the penalties of the law are de-

nounced, and no subtle finesse of construction ought to be adopted to defeat the end it is to be hoped may be ultimately accomplished."

### Sale of Wheat by Sample.

On the 7th of the month a firm dealing in grain, in answer to inquiries relative to wheat, wrote: "Will send you sample 3 Red to-day. Wheat would cost to-day 98." On the 10th the parties addressed wrote, suggesting that there was a mistake in price quoted, as the market for No. 3 was 90 and 91 cents, and very dull and weak. On the 14th the latter telegraphed the first mentioned dealers to quote lowest 3 Red Wheat. On the same day the first mentioned firm sent two telegrams, one reading, "87. \* \* \* Have five cars," the other, "Red, 96." Their correspondents replied that they would give 86½, which offer the first mentioned firm accepted, with an inquiry, "How many like sample?" In an action for failure to ship according to sample of the 7th, it being contended by the first firm that another sample marked "3" was sent on the 8th, and that in the telegram quoting price at 87 and the subsequent telegrams sent by them reference was had to this sample, that, as it was not claimed that the sale was on an inspection grade, it was error to have supposed defendant intended to undersell the market ten cents, and hence it would be conclusively presumed that the telegrams referred to the sample of the lower grade.—*Pitt vs. Emmons, Supreme Court of Michigan, 52 N. W. Rep. 1004.*

### Carrier—Consignment—Damages.

According to the decision of the Supreme Court of Georgia in the case of *Henry vs. the Central Railroad & Banking Company*, where it does not appear either that a carrier received goods consigned in bad order or that they were in fact in bad order when received, the presumption is they were in good order. The court further held that if by an actual sale and receipt of the price the consignee protects himself against any loss resulting from the goods being damaged in transit, he cannot recover of the carrier anything beyond nominal damages and costs; that the fact that he may be liable, on account of warranty or fraud in making the sale, to refund to the purchaser a part of the price, will not entitle him to proceed against the carrier before refunding on the contingency that this liability may some time be enforced; that if he has thus protected himself as to a part of the consignment but not as to the whole, he may recover actual damages as to the part on which he has sustained such damage, and that a declaration by a consignee against a carrier for damages which have never been sustained by the plaintiff is not amendable by introducing as a use of the action a purchaser from him who, by reason of paying for the goods more than they were worth, has sustained damage.

## ITEMS FROM ABROAD

Sweden's wheat, rye and oats have been harvested in fine condition.

Thousands of starving Mexicans recently raided the grain warehouses at Morelia.

Spain's wheat crop is now placed at 79,400,000 instead of 69,400,000, the earlier estimate.

Exports of grain from Russia for cash will be greatly stimulated by the recent announcement of a deficiency of \$100,000,000 on the budget for 1893.

South Russia has had no rain for six months, and the ground is so hard that farmers cannot break it with the plow. Winter wheat will be a total failure.

Charles Scholvin has built and placed in operation at Hamburg, Germany, a mill to grind American corn. This is the second mill built there to grind our corn.

The wheat crop of the United Kingdom, from figures given by the *London Times* October 10, is estimated at 56,325,000 bushels, against 74,742,700 bushels last year, and the quality is bad at that.

Switzerland imported during April, May and June 301,000, quarters of wheat, 41,000 of corn, 108,000 of oats, 12,000 of barley and 34,000 240-pound sacks of flour. The exports were insignificant.

Italy exported in August 200 quarters of wheat, 4,000 of corn, 109 of oats, 100 of barley and 380 sacks of flour, against 550 quarters of wheat, 1,000 of corn, 70 of oats, 60 of barley and 200 sacks of flour in August, 1891.

The Roumanian crops are placed by a recent estimate at 7,300,000 quarters for wheat, 529,000 for rye, 2,524,000 for barley and 1,415,000 for oats. Barley is above the average, wheat and oats slightly above and rye much below.

Russia is making efforts to improve the grain trade, and has recently instructed the grain inspectors stationed at the Odessa Elevator of the Southwestern Railway Company to take a sample of the grain received and another of the grain shipped, to be preserved in the office and certificates given showing the names of seller and

buyer. Experts in the office will determine the quality of the same, the percentage of impurity, etc.

Hundreds of carloads of corn are going into Mexico over the Southern Pacific, the Aransas Pass and San Antonio Railroads. The rush of grain will doubtless continue until November 30, when the corn duty will be reimposed.

Italy imported in August 573,000 quarters of wheat, 82,000 of corn, 4,000 of oats, 17,000 of barley and 550 240-pound sacks of flour, against 131,000 quarters of oats, 38,000 of corn, 1,000 of oats, 2,700 of barley and 150 sacks of flour in August, 1891.

Macedonia in Southern Europe harvested a larger crop of grain than in 1891, but the quality is no better. The export possibilities are estimated at 2,000,000 bushels of wheat, 1,000,000 of corn, 1,000,000 of oats, 2,000,000 of rye and 1,500,000 of barley.

Consul Turner of Cadiz, Spain, in view of the failure of the crop in that country desires samples of American grain to be forwarded to him with their commercial classifications and export prices. He will exhibit them on the Cadiz Board of Trade.

France's wheat crop is officially placed at 312,000,000 bushels, grown upon 17,300,000 acres. This is 8,000,000 bushels less than the average crop; consequently the importation will be 8,000,000 bushels in excess of the 40,000,000 annually imported in past normal years.

Sweden imported in the first eight months of 1892 262,000 quarters of wheat, 101,000 of rye, 28,000 of barley, 84,000 240-pound sacks of wheat flour, and 38,000 sacks of rye flour, against 165,000 quarters of wheat, 343,000 of rye, 500 of barley, 67,000 sacks of wheat flour, and 54,000 sacks of rye flour.

Bushire, Persia, exported of wheat 448,000 bushels in 1891, 108,000 bushels in 1890, 400,000 bushels in 1889, 288,000 bushels in 1888, 12,000 bushels in 1887, 29,600 bushels in 1886, 136,000 bushels in 1885 and 256,000 bushels in 1884. A partial embargo was placed on exports in 1885-86-87 and 1890.

India exported from April 1 to October 8 23,400,000 bushels wheat, 14,300,000 going to the United Kingdom, and 9,100,000 to the Continent, compared with 33,880,000 bushels exported in the corresponding period last year, of which 13,340,000 went to the United Kingdom, and 19,540,000 to the Continent.

Austria-Hungary exported in the crop year ending August 1, 334,000 quarters of wheat, 802,000 of corn, 603,000 of oats, 226,000 of rye, 1,870,000 of barley, 345,000 of beans, 24,000 of peas and 415,000 240 pound sacks of flour; and imported 66,000 quarters of wheat, 253,000 of corn, 92,000 of oats, 6,000 of rye, 25,000 of barley, 3,000 of beans, 2,000 of peas and no flour.

Europe is each year importing a greater quantity of breadstuffs from foreign lands. A few years ago 100,000,000 bushels exchanged between Russia and America and Great Britain and France was thought a large business, but in the past season the exchange has aggregated over 400,000,000 bushels. This large business is conducted upon a very small margin of profit.

T. Bowick, London correspondent of *Country Gentleman*, says that the millers' estimate of the wheat crop of France is wrong, because the only ground they have to go on is that the flour yielding quality of the new grain is better than expected. He estimates that at least 5,000,000 quarters will be imported by France to complete the annual consumption of 43,000,000 quarters, allowing for a good margin of old stocks in hand.

South of the Trent and Mersey the wheat crop appears to be practically secured, and many and bitter are the complaints of our correspondents as to condition, yield and price. It is true that Great Britain produces only some 3 per cent. of the world's wheat crop, but the variance of one or two million quarters in the yield in this country practically means a difference of 10 or 20 per cent. in the bulk on offer at this period of the year, a factor of some considerable importance. The outlook from an agriculturist's point of view is dismal in the extreme; the price of corn and horn is far below a remunerative level, and it is to be feared that this Michaelmas will witness many a homestead in financial ruins. The key to the situation this season may be found in an unexpectedly large demand for wheat from the Continent, which will help to raise prices out of the mire into which they have fallen. With the recent heavy importations of France and Germany so vividly in mind it is natural to look for an unusually light demand from these countries during the ensuing year, but the expected rarely happens.—*Liverpool Corn Trade News.*

Do you demur to demurrage? Then signify your opposition to the odious charge by signing "A Protest, A Petition," published elsewhere in these columns.

With California's exhibit at the World's Columbian Exposition will be shown seven fine silk banners, the gift of the San Francisco Produce Exchange, giving statistics of the wheat, barley and hop crops, the wine vintage and the production of fruit, raisins and wool.

Hon. J. R. Dodge's letter in defense of the general conservative and general accuracy of his reports is too long for our paper, but we commend it to dealers as a full and complete vindication of the methods of the government which we have always defended, as the safest and most reliable.—*Toledo Market Report.*



## GRAIN WAREHOUSES AT PORT COSTA, CAL.

The big warehouses up at Port Costa are full. They hold about 200,000 tons, although their combined capacity has been frequently stated to be much greater. Two hundred thousand tons, however, is a large quantity of wheat, but it represents only about one-fourth of the total bulk that is usually handled at Port Costa during a season.

The business men across the bay think that all this wheat should be shipped to Oakland and handled there, but Port Costa has long been the shipping point, and in spite of occasional spasmodic attempts on the part of Oakland to bring about a change, the business will probably remain where it is for a long time to come.

Port Costa is in just the right place for this wheat business. It is at the junction of the outlets of the San Joaquin and Sacramento valleys. It is at the most easterly point to which deep-water ships can go, and a ship can be taken from San Francisco Bay up to Port Costa at less cost than the railroad company will haul wheat from Port Costa to San Francisco or to Oakland.

There is plenty of room for wharves at Port Costa and plenty of water for all vessels. One firm built a warehouse at Benicia in 1880, but dredging has to be done there every two or three years to maintain sufficient depth for the ships, and so Benicia's chances to become a rival to Port Costa are not good.

It is also said that as three-fourths of the cars that haul wheat from the interior have to be returned empty, the railroad company finds it cheaper to stop at Port Costa than it would be to bring the cars through to Oakland even for the additional rates. So there is another reason why Oakland is not likely to wrest the wheat business away from Port Costa.

The first warehouse at Port Costa was built by G. W. McNear because he happened to own a big ranch there, including the water front, and he was a heavy dealer in grain. The site proved to be a good one, and gradually the other big warehouses were built up alongside McNear's. They are constructed at haphazard of brick, wood and corrugated iron, but they are somewhat expensive, as they are all built out over the water upon piles. Nearly all the big wheat dealers own or are interested in some of the warehouses there now, and that, together with the fact that water front titles in Oakland are somewhat uncertain, makes it additionally improbable that the wheat crop will ever be shipped through to the city. The Port Costa warehouses have about one and one-half miles of wharf room, which will accommodate all the ships that ever need to tie up there to receive wheat.

In the East all the wheat is handled with elevators. The Friedlanders tried that plan here and built an elevator at Vallejo, but it was not a success. The conditions are altogether different. The Eastern farmers haul nearly all their grain to market in small lots. It is graded and is then mixed with the grain from hundreds of other farms and the whole can be stored in one common lot in an elevator until wanted. When it is shipped it is loaded into vessels in bulk.

Here the system is to send the whole crop from a large ranch to market at once and each man's crop has to be kept separate from all others. Therefore, it has to be sacked and warehouses are necessary for its storage. It must also be stowed in sacks in the vessels for shipment because the insurance men will not take risks upon loose grain during the long journey around the Horn. The cargo is too likely to shift in the hold and bring disaster to the ship. Elevators here are therefore useless, and it requires twelve or fourteen men to handle the heavy sacks from a car at Port Costa. Perhaps the Nicaragua Canal would induce the insurance men to take risks on cargoes in bulk and so make elevators useful and the handling of the grain somewhat cheaper.

From four to five hundred men find employment at transferring wheat in Port Costa during the season, and they handle 90 per cent. of the whole crop that is sold for shipment from Suisun to Redding and from Lathrop to Bakersfield.

Much of the wheat that is grown in the Salinas Valley comes to San Francisco by rail, and when a vessel unloads here three or four hundred tons of Salinas wheat is put in her hold to stiffen her for the trip to Port Costa, where she takes in a full cargo.—*San Francisco Examiner*.

## B. & O.'S NEW THROUGH LINE.

PREPARING FOR THE IMMENSE TRAFFIC INCIDENT TO THE WORLD'S FAIR.

The management of the Baltimore & Ohio Railroad is preparing for an immense business in 1893 while the World's Fair is open in Chicago. The terminals at Chicago are capable of accommodating a much heavier traffic than is now being done, and important changes are being arranged for the handling of very heavy freight and passenger business to the West from New York, Philadelphia and Baltimore. New equipment for largely increased passenger business and an extensive stock of freight cars have been ordered. The various roads of the system will be improved by straightened lines, reduced grades, extra side tracks, and interlocking switches. The new line between Chicago Junction and Akron has shortened the distance between Chicago and tidewater twenty-five miles, and between Pittsburg and Chicago fifty-eight miles.

The distance between Chicago and Pittsburg and Chicago and Cleveland by the construction of the Akron line

and the acquisition of the Pittsburg & Western line and the Valley Railroad of Ohio is about the same as via the Lake Shore from Cleveland to Chicago, and by the Pennsylvania from Pittsburg to Chicago. The alignment is to be changed and grades reduced to a maximum of twenty-six feet. It is expected that within twelve months the old Baltimore & Ohio through line between Chicago and the Atlantic Ocean will have passed away and the new line via Pittsburg be established, with no greater grades or curvature than on any of the trunk lines.

Work has already begun east of Pittsburg to meet improvements making west of Pittsburg. These improvements will consist of additional second and third tracks, a general correction of the alignment, and completion of the double track on the Metropolitan Branch. It is expected that the new through line will be ready simultaneously with the completion of the Belt Line through the city of Baltimore, which is intended to unite the Washington branch with the Philadelphia division and do away with the present line via Locust Point. Forty new and powerful locomotive engines were added to the equipment during the last two months, and others are in process of construction. The permanent improvements now under way and in contemplation involve the expenditure of some \$5,000,000.—*Baltimore American*.

The corn crop plainly tells the character of the farmer. The politician's corn as a rule does not possess the vigor or robustness that is found in the crop of the agricultural specialist; the ears are smaller and the breed seems to have unmistakable evidence of degeneracy, though in the same field the big sunflower seems to blossom out with a brilliancy that is truly remarkable. The sunflower is without question the most economical and productive crop for the farmer politician.—*Market Record*.

## Miscellaneous \* Notices.

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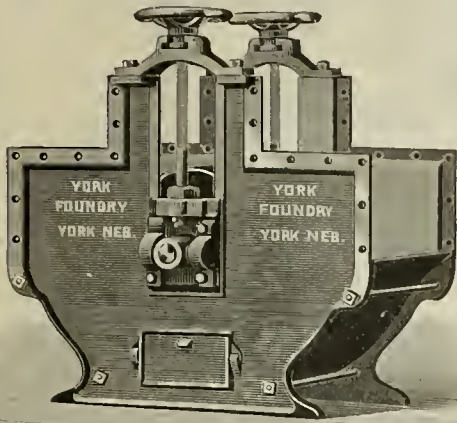
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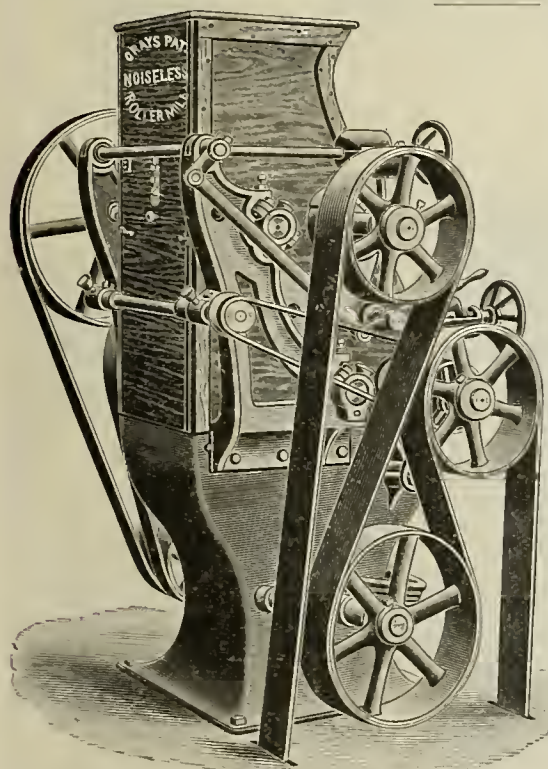


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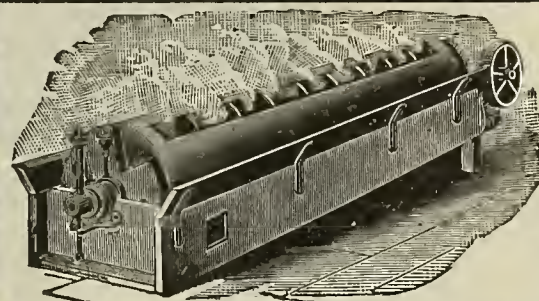
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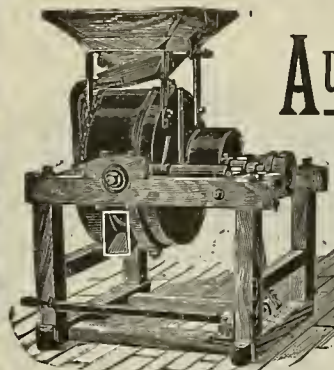


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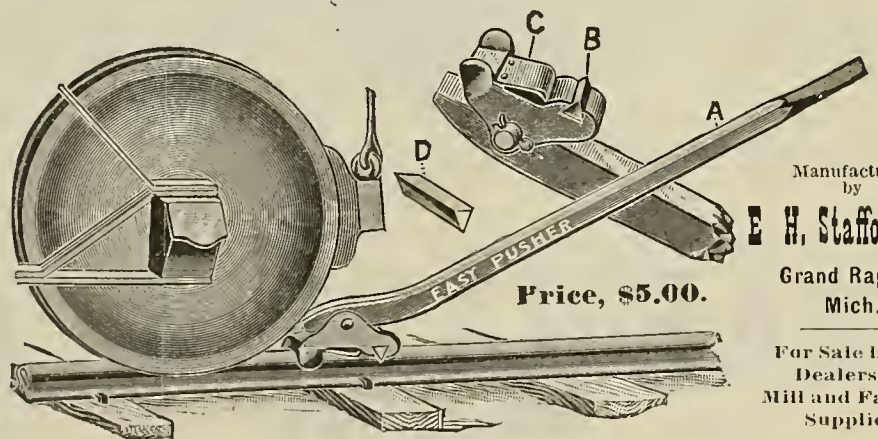
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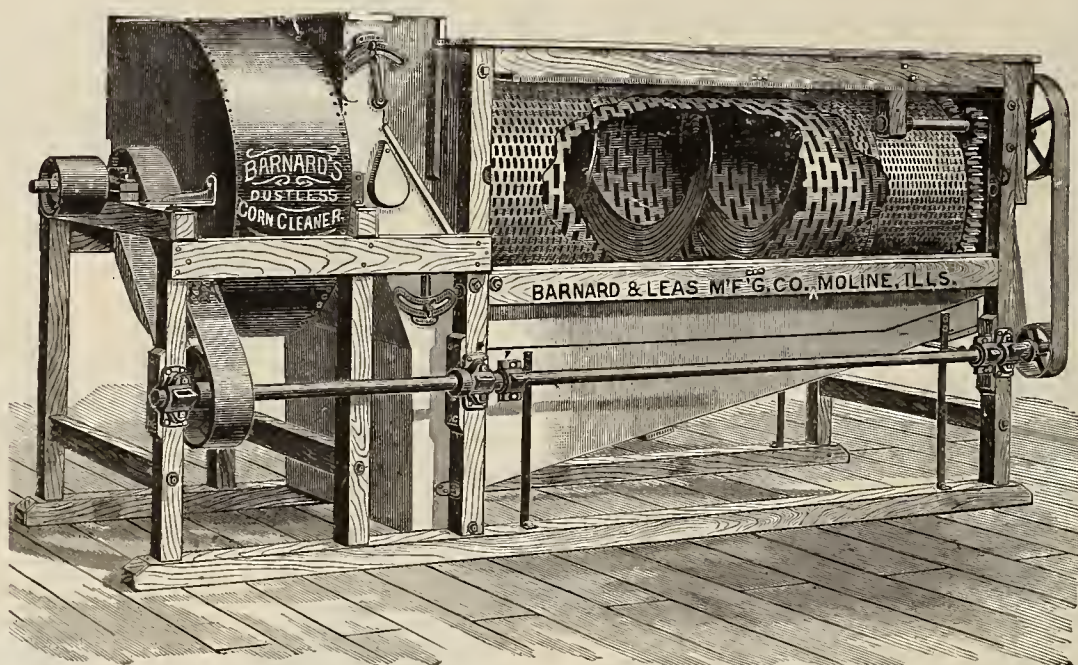
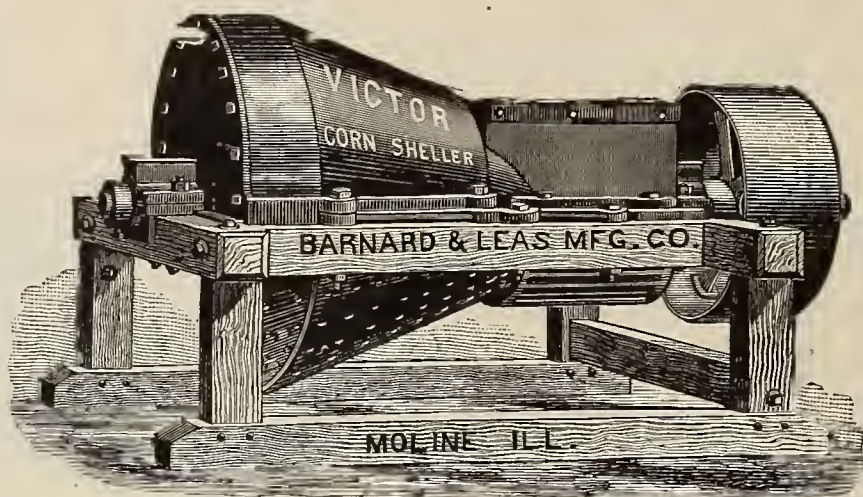
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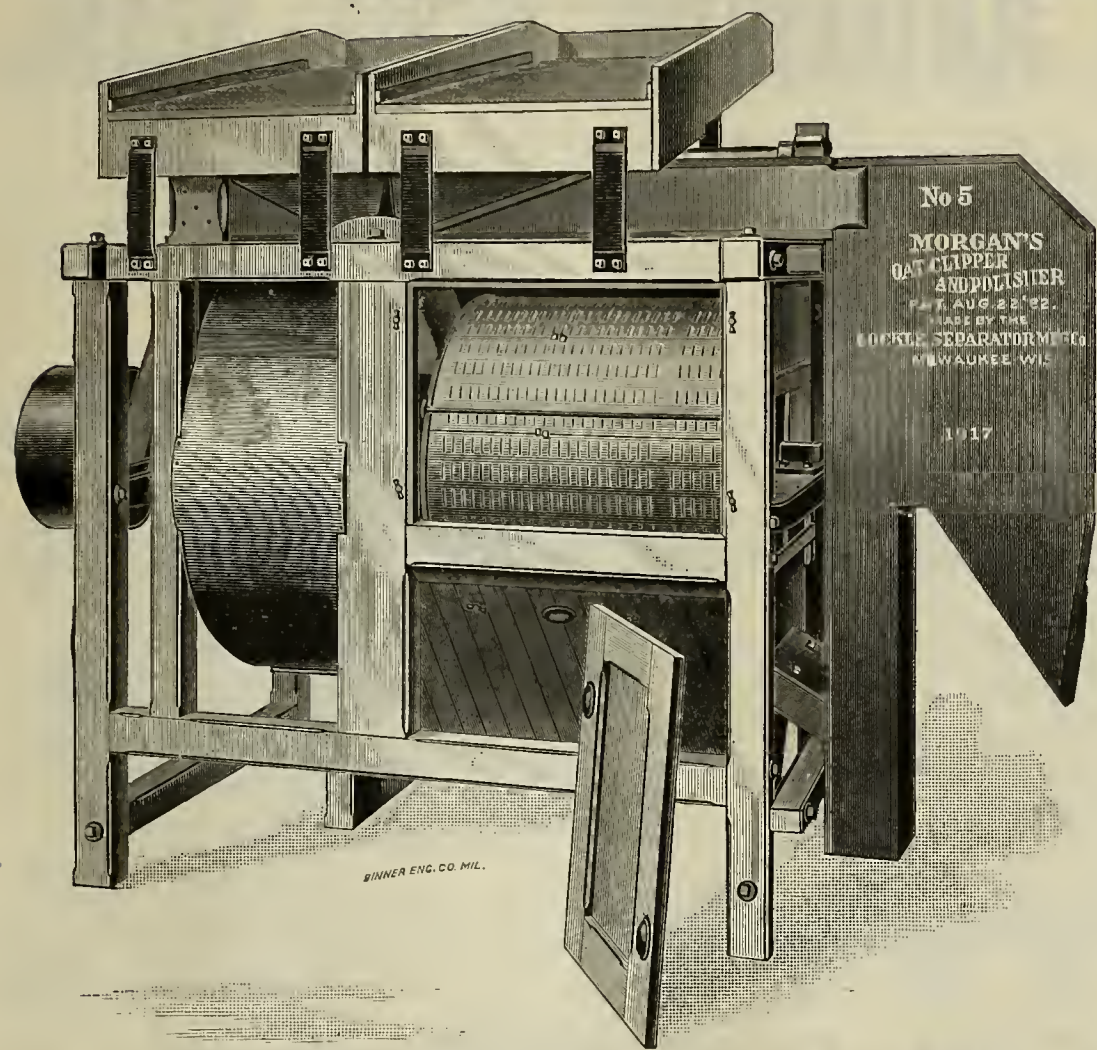
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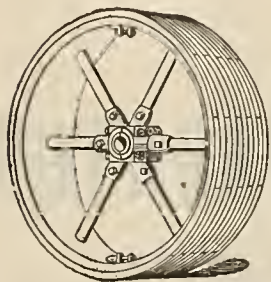
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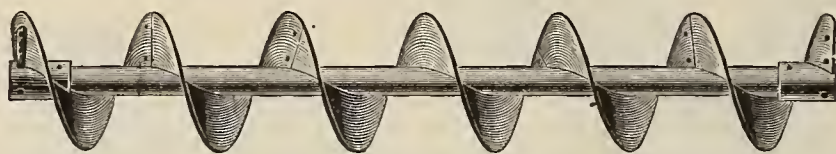


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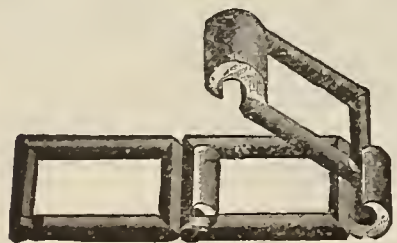
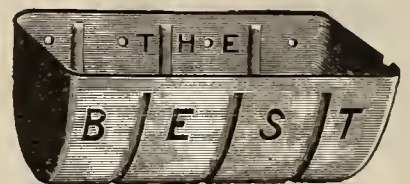
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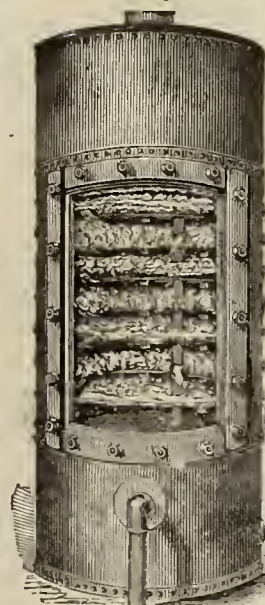
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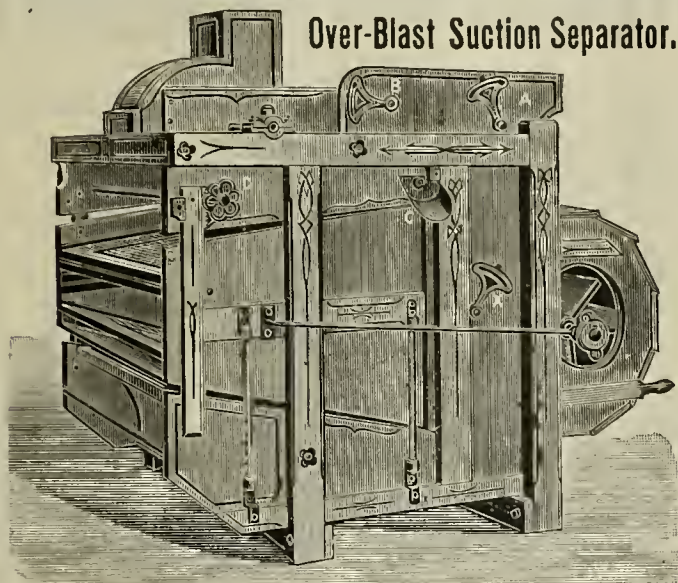




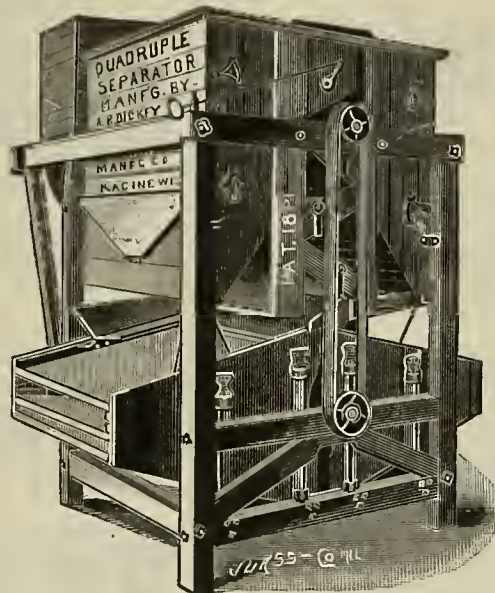
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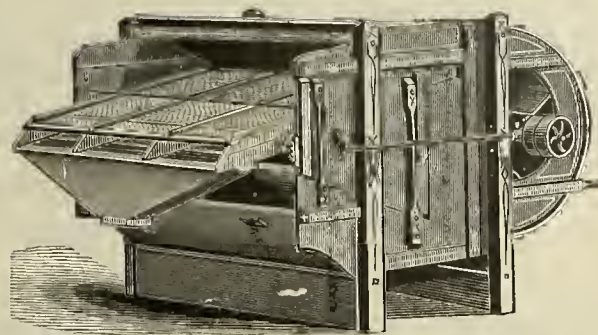


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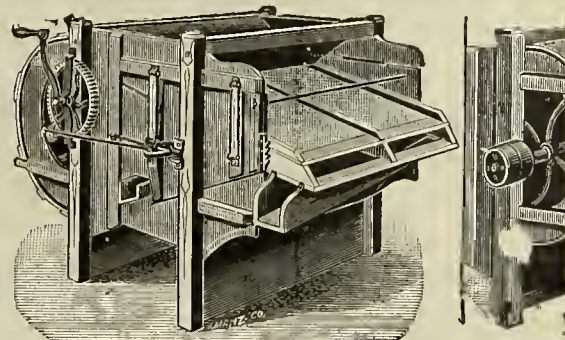


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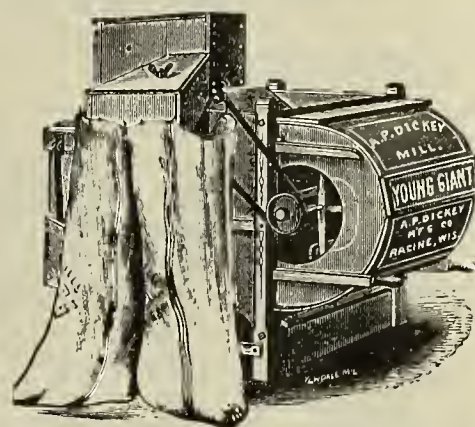
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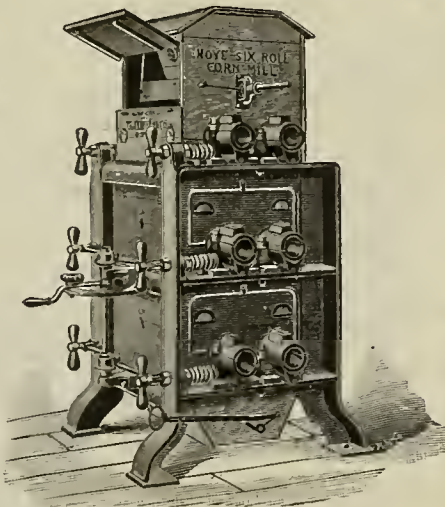
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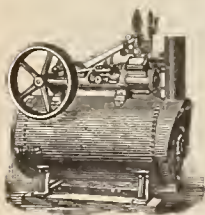
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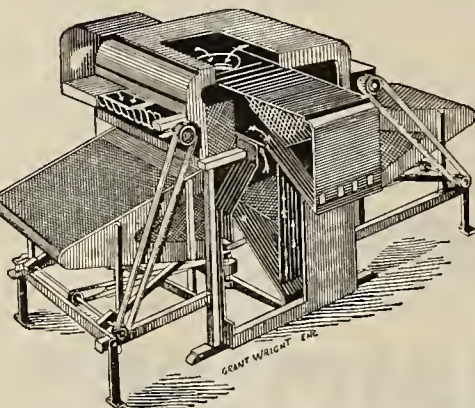
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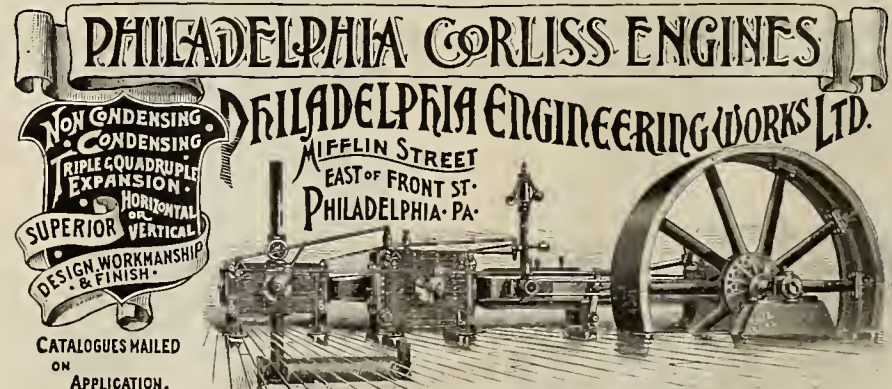
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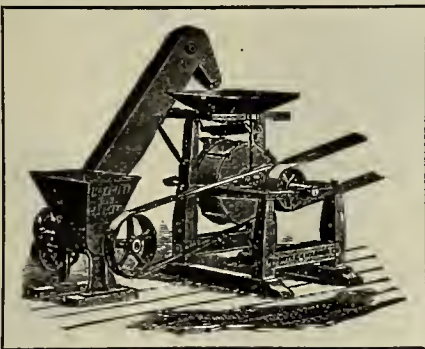
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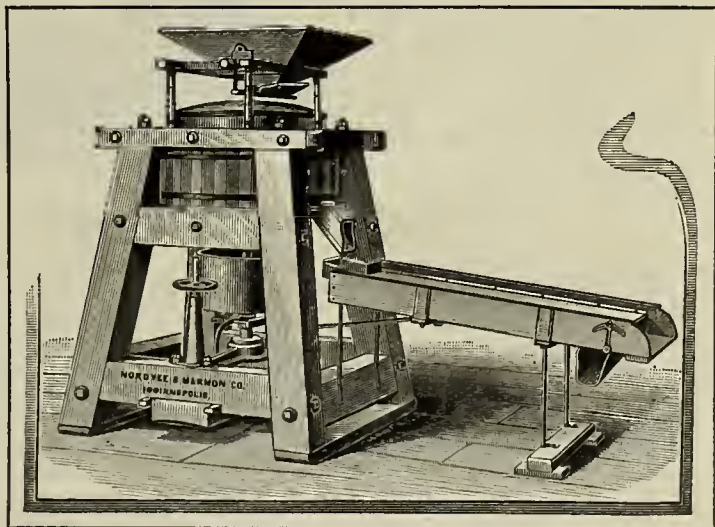
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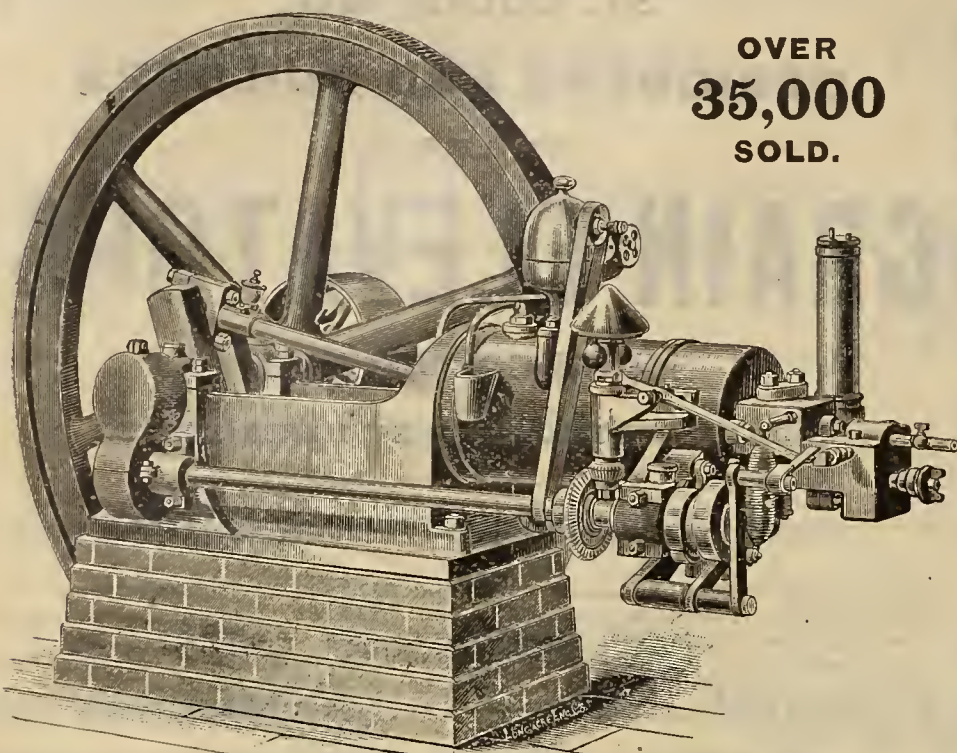
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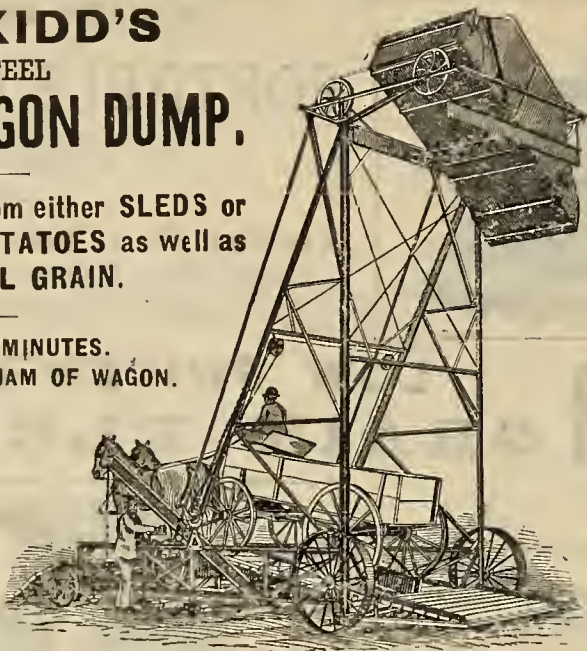
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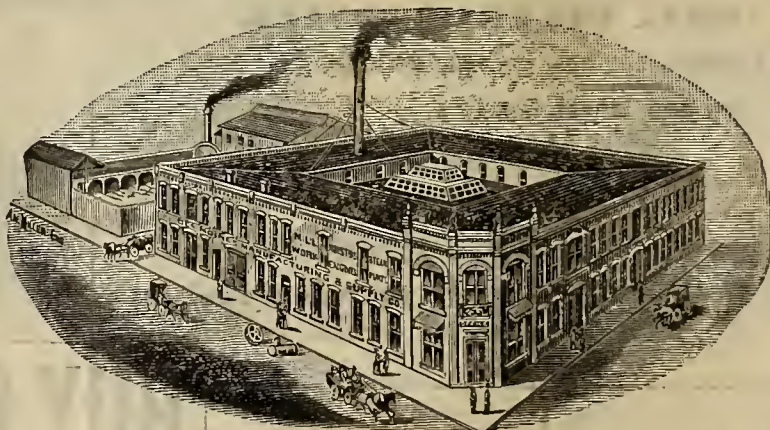
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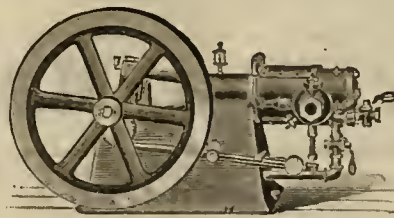
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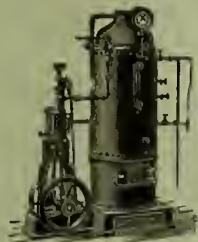
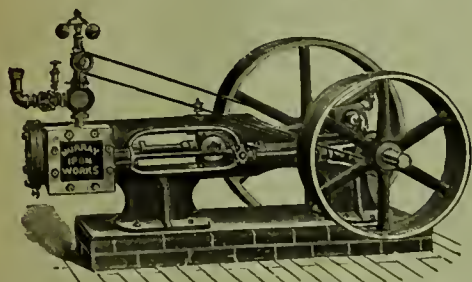
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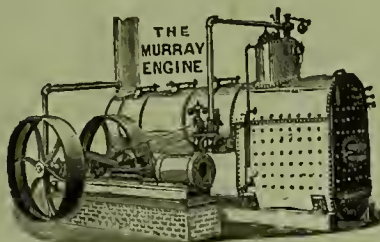
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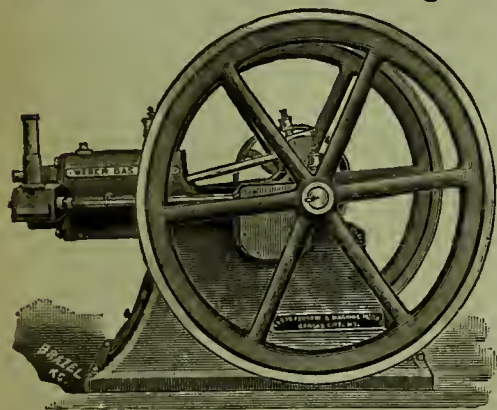
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GENTLEMEN:—In answer to your inquiry as to how we are pleased with the No. 4 power Weber Gasoline Engine in our Elevator at Camden Point, Mo., we will say we are well pleased, and have been from the first. It runs three sets of elevators, with a lifting capacity of 350 bushels each, two for wheat and one for screenings, 110 feet of conveyor, and one No. 1 "Western Separator." We receive wheat at end of building, convey 60 feet, raise 50 feet, drop to separator, and from separator to second set of elevators, raise again 50 feet, and convey to bins 50 feet. Equal to 700 bushels per hour, by double elevation at one time, at a cost of 10 cents (one gallon of gasoline). We find the greatest saving over steam to be on days we have the least work to do. We have started up, taken in, cleaned and put away one hundred bushels of wheat for five cents, actual cost of power. We find the Engine simple and easily run. One man does all our work, receiving, paying and cleaning wheat, and attends the engine. We cannot say too much in its praise for elevator purposes. Our insurance is 2 per cent, same as steam rate, which, we think, when understood, will be considerably less. Certainly the danger from fire is not near so great.  
Very truly yours, J. W. MAGEE, Manager.

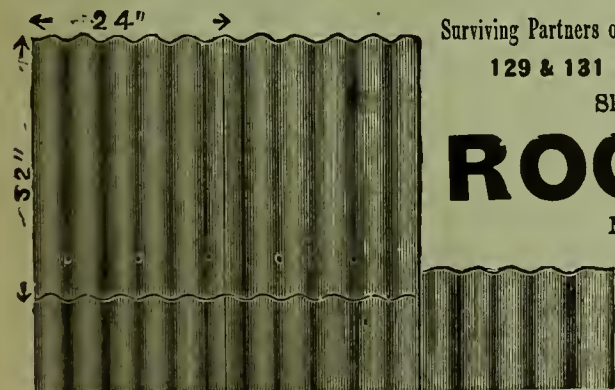
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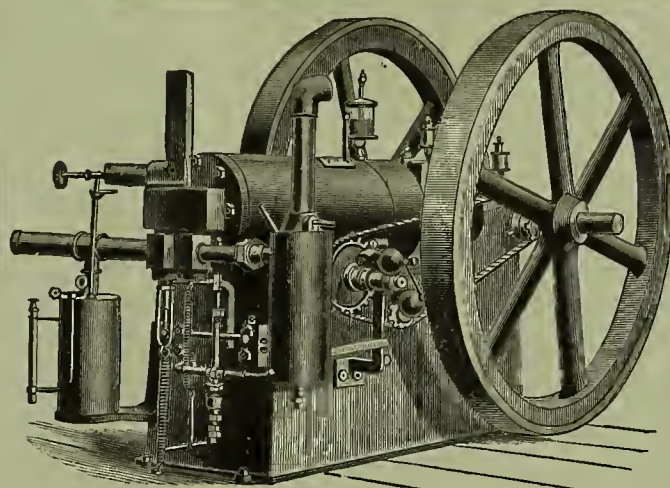
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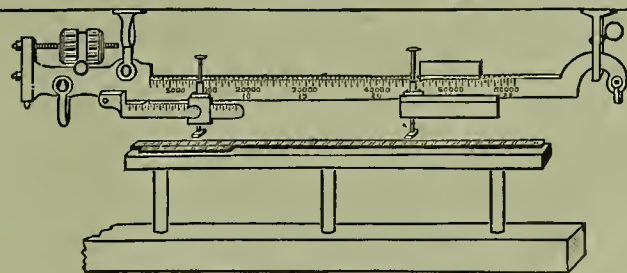
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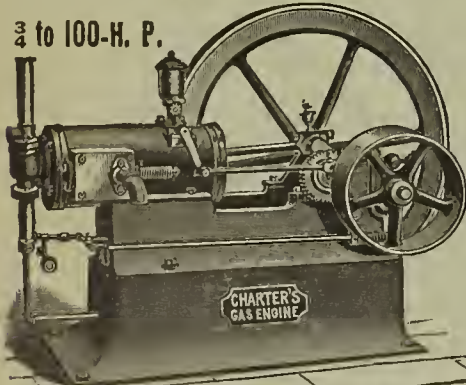
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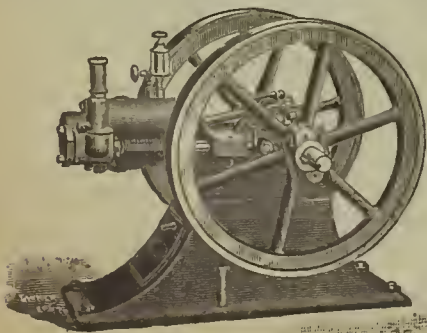
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